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INTERNATIONAL LABOUR REVIEW

VOL. LV, No. 6 JUNE 1947

Post-War Manpower Problems in Europe

Many countries are finding it necessary, in order to carry out their national economic programmes, to take stock of their manpower resources and to adopt policies intended to ensure that the labour force will be adequate in numbers, sufficiently skilled, and suitably distributed over the different branches of industry. In attempting to meet these requirements, the need for international co-operation is evident, and the studies of the International Labour Office, extending over many years, of such subjects as employment organisation, vocational training and migration, can make a valuable contribution towards the solution of manpower problems. The continued interest of the International Labour Organisation in these questions is shown by the setting up of the Permanent Migration Committee, the attention devoted by the I.L.O. Industrial Committees to the manpower problems of individual industries, and the placing on the agenda of the International Labour Conference of the subjects of employment organisation and vocational guidance.

The following article, which is based on a memorandum prepared in answer to a request from the Secretariat of the United Nations, gives a general picture of the manpower difficulties confronting countries — more particularly European countries — today, and describes measures that are being taken to overcome them.

IN CARRYING out their post-war reconstruction programmes, several European countries are at present experiencing an acute shortage of manpower, which is seriously affecting some sector of the national economy, such as mining, building, the metal industry or transport; in certain countries, such as Belgium and Czechoslovakia, the shortage is so general that it is holding up the whole activity of the country. There are a number of reasons for this shortage: to begin with, the war has everywhere left a large accumulated demand for investment and consumer goods; to meet this demand a high level of production must be maintained, and this involves large manpower requirements; the available manpower

has been further reduced by losses sustained during the war and also, in the case of certain Central and East European countries such as Czechoslovakia and Poland, by mass deportations carried out in order to restore national unity ; furthermore, the growth of public administrations during the war has absorbed a large number of workers who might now have been occupied in other work more essential to the revival of their country, and the distributive trades are engaging many others.

The war has also affected the distribution of manpower between the various industries inside each country. In several countries, particularly in Belgium, France, the Netherlands, Poland and the U.S.S.R., the miners abandoned the pits as the Germans advanced, and many did not return after the liberation ; a similar exodus occurred in the textile industries, particularly in Czechoslovakia, France and Norway. The shortage of manpower has in many cases been caused or accentuated by immediate reconstruction needs, as in the building trade. In countries like France, which have had to a large extent to fall back on the labour of prisoners of war, the return home of such prisoners will give rise to difficult replacement problems. Still other factors have arisen to complicate the situation, such as the decreased output per man caused by undernourishment during the war years, the lack of proper tools, and the employment in some cases of inadequately trained labour.

Owing to the very complexity of the problem, a number of different remedies have had to be considered. Furthermore, although the shortage of manpower is having immediate repercussions and it is therefore necessary to overcome it as rapidly as possible in order to hasten the economic restoration of the devastated countries, the long-term aspects of the problem must be borne in mind, so that measures taken at the present moment do not give rise to difficulties later on. But the two chief methods of approaching the problem are clear : the reorganisation of the employment market within each country, to make better use of the existing labour resources ; and immigration, which will allow manpower losses to be made up.

Utilisation of Existing Resources of Manpower

One after another, countries whose economic revival has been hampered by a shortage of labour have come to the conclusion that a reorganisation of the employment market was essential. The first step, after estimating the requirements of the national economy, was to bring the reserves of unoccupied manpower onto the employment market, and then to ensure a better distribution of the whole working population between the various sectors of industry in order to increase output. Although the idea of drawing up a man-

power policy is by no means new, since during the war the chief belligerent countries had been aware of the urgency of ensuring the best possible use of their labour strength, it is interesting to note that the countries of Europe are increasingly coming round to this idea, in order to meet the manpower difficulties of the post-war period. Although the strictness of the measures taken varies from country to country, the same anxiety is everywhere found for ensuring that the national economy should have available a sufficient number of workers with the desired qualifications.

Manpower Budgets

One of the primary conditions for the establishment of a manpower policy is the collection of exact data on the number of workers required and the number available. The employment service in each country is already responsible for collecting and publishing statistics relating to employment and unemployment; these figures are particularly important in view of the necessity of having the fullest possible information on the working population in order to apply a manpower policy as detailed as that required for an economic plan; certain countries, such as France, have therefore been considering the revision and extension, on new foundations, of the methods at present in use.[1] Furthermore, it is beginning to be recognised that for the effective application of a full employment policy, estimates of future labour requirements are also necessary. Several countries of Europe, faced by the manpower crisis, have therefore decided to draw up manpower budgets. The principle of such budgets was expressly accepted as early as 1944 by the British Government, which considers that the budget of total expenses must be supplemented by a manpower budget.[2] In Hungary the Trade Union Council, which is responsible for the management of the trade union employment service scheme, has been requested to draw up a national plan for the most effective employment of the country's manpower, on the basis of statistics collected by the employment exchanges. Czechoslovakia, France, Poland and Yugoslavia have all made estimates of the manpower necessary for the execution of their reconstruction and economic development plans, and have studied its distribution year by year between the various branches of industry. The manpower budgets of Czechoslovakia, France and Great Britain are as follows:

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[1] COMMISSARIAT GÉNÉRAL DU PLAN; COMMISSION DE LA MAIN-D'ŒUVRE: *Rapport préliminaire* (Paris, Aug. 1946).

[2] Cmd. 6527 (London, H.M. Stationery Office).

CZECHOSLOVAKIA : DISTRIBUTION OF ADDITIONAL MANPOWER REQUIRED FOR THE TWO-YEAR PLAN [1]

Mines	21,000
Power	5,000
Foundries	4,000
Light engineering	35,000
Chemicals	12,000
Glass	15,000
Building materials and potteries	48,000
Paper mills	11,000
Timber	20,000
Textiles	57,000
Leather and rubber	11,000
Total	239,000 [2]

[1] *Czechoslovak Economic Bulletin* (Prague) No. 52, 10 Oct. 1946.

[2] Additional requirements for agricultural workers are estimated at 200,000. Cf. Jan ROUBAL: *Two Years of Work : Comments on the Czechoslovak Economic Two-Year Plan* (Prague, 1947), p. 36.

FRENCH MANPOWER REQUIREMENTS [1]

	1946	1947		1950
	July	End of first six months	End of year	
Power :				
Coal mines, electricity, gas, liquid fuels	492,000	502,000	501,000	479,000
Transport and communications	1,178,000	1,210,000	1,243,000	1,355,000
Industry :				
Metals	1,331,000	1,427,000	1,484,000	1,472,000
Building materials	86,000	94,000	98,000	110,000
Textiles	510,000	565,000	595,000	665,000
Various	2,545,000	2,590,000	2,640,000	2,700,000
Building and public works	1,000,000	1,050,000	1,100,000	1,240,000
Agriculture and forestry	6,600,000	6,600,000	6,600,000	6,250,000
Total [2] (in round figures)	13,740,000	14,040,000	14,260,000	14,270,000

[1] COMMISSARIAT GÉNÉRAL DU PLAN : *Rapport général sur le premier plan de modernisation et d'équipement*, Nov. 1946, pp. 80-81. Figures are based on a 48-hour working week. The average working week in July 1946 was 43.5 hours.

[2] Workers directly engaged in production. No estimate is given of manpower to be employed in distribution and services in 1947 and 1950 ; in July 1946 the total was 6,510,000.

GREAT BRITAIN : MANPOWER REQUIREMENTS [1]

	Dec. 1946	Dec. 1947
Coal industry	730,000	770,000
Public utilities	258,000	275,000
Transport	1,373,000	1,370,000
Agriculture and fishing	1,081,000	1,120,000
Building and civil engineering	1,250,000	1,300,000
Building materials and equipment	628,000	650,000
Metals and engineering	2,811,000	2,840,000
Textiles and clothing	1,405,000	1,475,000
Other manufactures	2,186,000	2,225,000
Distribution and consumer services	4,270,000	4,325,000
Public service	2,130,000	2,050,000
Total	18,122,000	18,400,000

[1] *Economic Survey for 1947.* Cmd. 7046 (London, H.M. Stationery Office, Feb. 1947), p. 29.

Recruitment and Distribution Measures

Increasing the Number of Workers Available.

After calculating its probable manpower requirements, each country has applied itself to the problem of finding the necessary additional workers wherever the existing labour force already in employment was insufficient to meet requirements. Thus there has everywhere been an extension of the services to assist young workers, and efforts have been made to bring the unemployed back into work and to encourage the engagement of disabled persons, women and older workers.

Young persons constitute the final source of all manpower, and the present crisis has thrown into sharp relief the necessity for improving the means by which they make contact with the world of work. The judicious guidance of young workers towards the various sectors of industry would not only help to solve present difficulties, but would also have a wholesome effect ultimately on the structure of the employment market. Many young people are going into non-essential sectors of industry which at the moment are over-manned, and in which their prospects are in many cases precarious. With an eye to meeting these difficulties a number of countries, including Belgium, Czechoslovakia, France, Great Britain, Hungary, the Netherlands and Norway, have developed special services for young workers; through these services a better vocational distribution of young persons can be achieved, from the point of view both of the national economy and of their own inclinations and abilities.

The registration of the unemployed provides the basis for directing unemployed workers into the appropriate branch of industry. Unemployment allowances are not generally granted unless the placement service is unable to offer any " suitable employment " ; by extending the notion of " suitable employment " it would be possible to direct unemployed workers into any work which is considered essential and which is held up for lack of workers. In France, for example, an Order dated 2 February 1945 provides that the labour exchanges may direct unemployed workers, for a period not exceeding six months, to any region where there is an urgent shortage of labour. Such workers are paid transfer compensation, or an allowance for the upkeep of two homes. The public employment service in Yugoslavia was granted similar powers at the time of its reorganisation in June 1946. In Belgium, the fund for the maintenance of unemployed workers, which is responsible for the administration of unemployment insurance, is also concerned with placement, and this makes control easier. In Belgium, as in France and the Netherlands, the organisation of training and retraining centres for unemployed workers is being vigorously promoted, so that the workers can be reabsorbed into new trades.

Decentralisation of industry is another means of adjusting employment supply and demand when lack of local industries causes regional unemployment. Various methods can be used to influence the distribution of industry : the building of premises can be made subject to previous authorisation, or a programme of public works can be instituted ; more direct measures include the building of factories by the State for exploitation by private enterprise, or the acquisition and development of sites for social purposes. The principle of a decentralisation of industry policy has already been accepted in Great Britain, where great efforts have been made to develop the areas worst hit by the crises of the past, and the principle is now being studied in France.[1]

On the whole, however, the unemployed do not constitute any large-scale reserve of manpower. In most of the countries that are short of manpower, unemployment has been reduced to a proportion less than the 3 per cent. of the working population considered normal in a period of full employment.[2] It is not, therefore, possible

[1] COMMISSARIAT GÉNÉRAL DU PLAN ; COMMISSION DE LA MAIN-D'ŒUVRE : *Rapport préliminaire*, p. 32.

[2] The average number of unemployed persons in the various countries in the second half of 1946 was :
Belgium : 43,391 (average daily number receiving assistance in 1946) ;
Czechoslovakia : 14,359 (workers seeking employment in July 1946 ; it was later estimated that 90 per cent. of these had already found employment) ;
France : 9,038 (figure for 30 Nov.) ;
Netherlands : 39,041 (number of totally unemployed workers registered with the labour exchanges) ;
Norway : 6,489 (figure for Oct.).

to hope that reduction in unemployment will provide any important contribution to the labour supply. It is for this reason that the recruitment of workers among groups not hitherto gainfully employed, or difficult to employ, has assumed new importance. These groups are, in particular, disabled persons and cripples, women and older workers. In this context the recommendations of the Manpower Committee of the Planning Staff in France are worth quoting. The Committee suggests:

(1) that certain employments should be reserved for cripples and partially disabled persons, and that admission to these employments should be subject to medical examination [1];

(2) that cripples and partially disabled persons should report to the employment offices and be directed by the latter either directly to jobs or to training centres;

(3) that a sufficient number of places should be reserved in apprenticeship centres for cripples and that special sections should be set up for their benefit, especially in sanatoria;

(4) that women's work should be encouraged by the following measures:

(a) women's pay to be made equal to men's pay for equal work;

(b) greater facilities for women to acquire and extend their vocational skill; access for women to all the higher posts and grades of the public services;

(c) replacement of the single wage-scale by family allowances payable for the first child and after;

(d) shopping facilities (co-operatives) to be provided for women in work;

(e) expansion of social services to assist women in work;

(5) that no refusal to engage older workers should be made without the advice of the Works Council.[2]

Czechoslovakia also advocates drawing on the labour reserves among cripples, women and older workers. To encourage the employment of women, for example, crèches and a widespread system of laundries and mending services are to be provided, to lighten the duties of women workers. To encourage older workers and cripples to take up work, they are allowed to retain their full pension rights.[3] In Great Britain, industry has been asked to adjust condi-

[1] A Bill to this effect has been laid before the State Council.

[2] COMMISSARIAT GÉNÉRAL DU PLAN; COMMISSION DE LA MAIN-D'ŒUVRE: *Rapport préliminaire*, pp. 33-34.

[3] Jan ROUBAL, *op. cit.*, p. 38.

tions of work so that women may be employed who are only able to work on a part-time basis. The pensions system established by the National Insurance Act also encourages older persons to postpone retirement.[1]

Increase in Working Hours.

The recruitment of fresh workers has the effect of increasing the number of hours of work put in by the labour force as a whole; another means of achieving the same object is to lengthen the working week. In Czechoslovakia the number of statutory holidays has been reduced in order to recover the working hours which would otherwise have been lost.[2] In the Netherlands, the miners have on several occasions given up their Sunday rest in order to increase the output of coal.[3] In France, the working week is to be increased to 48 hours in order to carry out the Economic Plan, though the legal working week still remains at 40 hours and workers are paid for the hours in excess of 40 at overtime rates.[4]

Redistribution of Manpower.

In addition to measures designed to employ or re-employ sections of the population not normally included in the gainfully occupied labour force, several countries have examined the possibility of bringing back into the branches of industry essential to economic revival workers at present engaged on less important work, or in industries in which a rationalisation of production methods would allow the use of fewer workers. In this way Poland, in order to increase its industrial manpower, is endeavouring to reduce its agricultural population, among which there is in any case fairly widespread unemployment. In Czechoslovakia and France cuts are being made in the staffs of the public services, and workers thus set free are directed to occupations which will be equally suited to their abilities but which will allow them to make the maximum contribution to the reconstruction of the country. In France, a Guidance and Re-employment Centre for the staffs of the public services has been set up for this purpose[5], and it is also proposed to reserve employment in the public services as far as possible for cripples and older workers, and to prohibit them to young persons capable of employment in other sectors. Czechoslovakia hopes to gain a considerable number of workers for essential industries by

[1] *Economic Survey for 1947, op. cit.*

[2] Communication from the I.L.O. Correspondent, Prague.

[3] *Het Vrije Volk* (Amsterdam), 10 Mar. 1947.

[4] COMMISSARIAT GÉNÉRAL DU PLAN : *Rapport général sur le premier plan de modernisation et d'équipement*, p. 82.

[5] Cf. *International Labour Review*, Vol. LIII, Nos. 5-6, May-June 1946, p. 412.

nationalisation, which will replace a large number of undertakings, banks and insurance companies by a small number of nationalised undertakings employing a much smaller administrative staff.[1] In the same way, the labour employed in distribution services has greatly increased in most countries since the war, and though it would be difficult to reduce it, since this is not the case of a publicly controlled sector of industry, measures such as the prohibition of the establishment of new businesses, as advocated in France[2], should prevent a further increase over present numbers.

Rehabilitation of Certain Industries.

Several countries have been considering means to rehabilitate certain occupations which are suffering from a shortage of manpower, in order to attract workers by the better conditions offered. This need has been felt most particularly in the coal mines, where manpower has been declining for several years.[3] In Belgium, for example, the Government has taken various measures to increase the output of coal and to bring new workers into the mines ; a " miners' charter " has been adopted ; working clothes and footwear have been distributed ; miners are given special privileges in obtaining food supplies ; and finally, special bonuses are paid to unemployed workers recruited for underground work who have never previously been engaged in such work.[4] In France, the Netherlands, and Poland, various measures have been taken to make mining more attractive. In Great Britain, the Government's programme to encourage recruitment for the coal mines includes the maintenance of a high wage level, security of employment, modernisation of equipment, improvements in safety, health, social welfare and housing conditions, the extension of vocational training facilities, and increased opportunities of promotion to higher posts. In Czechoslovakia, where the hardest-hit sectors of industry are mining, the metal trades and agriculture, specially favourable treatment is granted to workers engaged in these branches of industry, including higher wage rates and reductions in taxation.

Mobilisation of Manpower.

In addition to these measures intended to encourage the recruitment and movement of workers on a voluntary basis to those branches of industry which are short of manpower, certain countries

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[1] Jan ROUBAL, *op. cit.*, p. 36.

[2] *Les Nouvelles Economiques* (Paris), 31 Jan. 1947.

[3] From 1929 to 1935 a decline of about 15 per cent. occurred in the fourteen main producing countries. This decline amounts to 22 per cent. if Russia is excluded. Cf. I.L.O. : *The World Coal-Mining Industry* (Geneva, 1938).

[4] *Revue du Travail*, July-Aug. 1946.

have resorted to compulsory labour service in order to obtain the necessary workers. This has been the case in Czechoslovakia, Hungary and Poland. In Hungary there are two forms of labour service: men between 18 and 60 and women between 18 and 50 may, with certain exceptions, be compelled to put in 4 days' work per month for reconstruction, or to pay a sum equal to their wages for the 4 days; or they may be mobilised, either where they live or away from their usual home, to perform work of public importance for a fixed or indefinite period. In Czechoslovakia and Poland, registration for mobilisation purposes is with certain exceptions compulsory for men between 18 and 55 and to women between 18 and 45. In Czechoslovakia, however, it was not until December 1946 that the Minister for Social Affairs drew up measures for the practical enforcement of mobilisation.[1] Up to that date, except in the case of agriculture, where a decree dated 12 August 1946 had mobilised young persons born in 1927 and 1928 for harvest work, the formation of volunteer brigades had been sufficient to meet requirements of manpower. These brigades were composed of workers from non-essential industries and industries where work was limited by a shortage of raw materials; workers were mainly directed to the mines, but some brigades were engaged on the repair of agricultural machinery in the country or the restoration of power stations, etc.[2] In Belgium, decrees published in April and May 1945 introduced civil mobilisation of individuals and undertakings; under these all persons who have completed their 18th year may be obliged to register and to accept any employment that is offered by the placement service in specified essential industries. In the same way, all workers engaged in these industries are considered as mobilised in a civilian capacity.[3]

Reorganisation of the Employment Service.

In order to apply its manpower policy, each country must be in a position to exercise effective supervision over the entire labour force; but the experience of the belligerent countries during the war proves that such supervision can only be maintained through an effective and centralised employment service, having as direct an authority as possible over all workers. It is therefore essential, if responsibility for placement is divided, owing to the existence of private placement agencies or because there are separate specialised

[1] *Czechoslovak Economic Bulletin*, No. 60, 5 Dec. 1946.

[2] *Prague News Letter* (Prague), 13 July 1946.

[3] The mobilisation of undertakings implies that those responsible for their management must continue operation under the conditions laid down by the competent mobilisation authority. It should be noted that the trade unions are opposed to the continuation of mobilisation measures. Cf. FÉDÉRATION GÉNÉRALE DES TRAVAILLEURS BELGES: *F.G.T.B.* (Brussels), 27 July 1946.

employment services for certain groups (*e.g.* workers in agriculture and forestry, seamen, and young workers), that all placement activities should be co-ordinated as closely as possible.

This necessity has been well understood in all the European countries now struggling with manpower problems, and most of them have taken steps to reorganise their employment service : in particular, Belgium, Czechoslovakia, France, Hungary, the Netherlands, Norway, Poland and Yugoslavia. In other countries there have been few structural alterations in the employment service since the end of hostilities, but the services have retained certain powers given to them during the war, as, for example, in Finland and Great Britain. One of the characteristics of this reorganisation has been that the employment service is given wider powers for regulating the employment market. In some cases this is achieved by a centralisation of placement duties, private agencies being either abolished or subjected to stricter control, as in Belgium, France and Poland ; in other cases the service has been given new functions which enable it to make its action felt more widely over the employment market and thus to play its part in the application of manpower policy.[1]

Several countries have placed their employment services in a position to influence the distribution of manpower by increasing their control over the movement of workers. In most countries legislation specifies that all unemployed workers are to register with the employment service and that all job vacancies are to be notified to it ; employers making direct engagements are to inform the service. Similarly, methods of publishing information have been or are being improved to allow employment supply and demand to be cleared more rapidly.

In certain countries, however, legislation implies not only supervision but direction of the movements of workers. Employers are in many cases obliged to apply in the first instance to the employment service when they wish to engage workers, and may not make direct engagements without its agreement. This is the case in certain sectors of industry in Bulgaria, Finland, France and Great Britain, and applies to all employment in Czechoslovakia, Greece and Hungary. Similarly, discharge of workers is in some cases subject to previous authorisation by the employment service, either in certain industries and branches of industry, as in Bulgaria and France, or for all occupations, as in Czechoslovakia.

These various provisions allow the employment service to keep itself fully informed of the fluctuations of employment in each sector of industry, and at the same time to influence the distribution

[1] Cf. International Labour Conference, Thirtieth Session, Geneva, 1947, Report V (I) : *Employment Service Organisation* (I.L.O., Montreal, 1946) ; and *International Labour Review*, Vol. LV, No. 5, May 1947, pp. 372-395.

of manpower in the light of the real needs and the importance to the national economy of the undertakings or branches of industry in question. This influence is particularly effective when the service is in a position to control engagements and cancellations of contracts of employment, but is none the less real, though less tangible, in other cases; in fact, since the employment service is, through the centralisation of detailed and complete information, the only authority fully informed on labour supply and demand, employers and workers have every advantage in applying to it.

Vocational Guidance and Training

In order to achieve the desired result, recruitment and distribution of labour within the framework of general economic policy must be accompanied by a high level of productivity. One of the means of achieving and maintaining a high output is to improve vocational guidance and training. It is useless to direct workers to one or other sector of industry unless they possess the necessary abilities to exercise the callings to which they are directed, and are able to acquire the necessary skills. This necessity has in fact been more or less generally understood, and was re-emphasised by the International Labour Conference in the Recommendation of 1944 concerning employment organisation in the transition from war to peace.[1]

Vocational Guidance.

In most countries, vocational guidance has been developed primarily for the benefit of young workers. This guidance — one of the chief duties of the special services to assist young workers which have recently been organised or reorganised in a number of countries — involves a better diffusion of information concerning employment, while attaching due importance to the study of available openings and to an intelligent choice on the part of applicants:

[1] In this Recommendation (No. 71 : cf. *Official Bulletin*, 1 June 1944, p. 61), the Conference advocates in section V the development of vocational training for adult workers, and in section VI the formulation of national training and retraining programmes geared to the post-war needs of the economy and taking into account changes in the different skill requirements of each industry; the adaptation of these programmes to the needs of demobilised persons and discharged war workers, taking into account the future prospects of the employments in question; the development of train... of skilled workers and the payment to persons undergoing training of remuneration sufficient to provide encouragement to undergo such training; the training of new instructors, and instruction of teachers and qualified instructors in new methods and techniques; international collaboration for the purpose of restoring and expanding vocational training; and co-ordination of vocational training and retraining institutions on a national, regional and local basis.

In 1939 the Conference had already adopted two Recommendations (Nos. 57 and 60) referring respectively to technical and vocational education and to apprenticeship.

as has been brought out by the report of the Manpower Committee in France, " the analysis of employment openings from a psychological point of view, and the selection of applicants by doctors and psychotechnicians, will allow workers to be guided to those jobs for which they are best fitted ; increased productivity will thus be achieved ".[1] One serious obstacle to the rapid development of vocational training is, however, the shortage of vocational guidance officers. Belgium, France, Great Britain and the Netherlands have endeavoured to overcome this difficulty by setting up adequate facilities for the training of guidance officers and by laying down rules for this profession. The National Institute for Labour Studies and Vocational Guidance in France is running study courses leading to the diplomas required for public practice of vocational guidance. In the Netherlands too, special courses have been organised.

The vocational guidance of adult workers is far from being developed to the same extent ; nevertheless, progress has been made in the matter of measures for the reclassification of unemployed workers, providing either for a single interview with a guidance officer as in Great Britain or, as has recently been begun in Belgium and France, a real selection test including psychotechnical and general ability tests.

Vocational Training.

Vocational guidance and training are closely connected. At the vocational guidance interview, workers receive information on existing facilities for vocational training ; as the number of workers passing through the guidance centres increases, it will be easier to expand these facilities with full knowledge of manpower requirements. There is in fact a general tendency to centralise all activities concerned with vocational training in order to allow the formulation of a national programme in the light of reconstruction needs. A National Committee for Vocational Training was set up in France in November 1946 and a committee for the development of apprenticeship has been in operation there since 1945. In Belgium, Bulgaria, Czechoslovakia and the Netherlands, vocational training is expanding rapidly under the auspices of the employment service. In Great Britain the return of ex-servicemen to civil life and the change-over from a war to a peace economy have necessitated the organisation of vocational training on a wide scale, and many new centres have been opened by the Government. In Hungary, vocational training and retraining are the responsibility of the Ministry of Reconstruction, which is to ensure that citizens subject to compulsory labour service shall, wherever necessary, have the opportunity

[1] *Op. cit.*, p. 20.

to acquire the qualifications necessary for the occupations to which they are directed. Those industries which have been hardest hit by the shortage of manpower have in many cases drawn up their own training schemes; the State generally makes itself responsible for a part of the cost, but reserves the right to approve the schemes and supervise their execution, this being the case for example in Czechoslovakia, France, the Netherlands, Poland and Yugoslavia.

A further characteristic of the development of vocational training has been the increasingly important role payed by employers' and workers' organisations, either in a consultative capacity or even in the management of the centres. In Belgium, both sides of industry are actively interested in the formulation of programmes, and have given full support to the centres in recognition of the useful work they are doing.[1] In Czechoslovakia, similar co-operation has arisen from the fact that the Trades Union Council is closely concerned in the execution of each stage of the Two-Year Plan. In France co-operation is provided for by the Decree of 9 November 1946, which stipulates that the National Committee for Vocational Training shall include four employers' and four workers' representatives; this Order entrusts the management of training centres within undertakings to the Works Committees, and the management of group centres to joint committees appointed by the Manpower Committees of each *département*. In Great Britain the trade unions have played an essential part in the formulation of apprenticeship and vocational training programmes designed to give the country the skilled labour which it so urgently needs, particularly for the building trade.[2]

Owing to the shortage of skilled workers, accelerated training has developed rapidly. Apprenticeship and technical education, which are the normal methods of training young persons, will not give results for some time; it has therefore been necessary to develop methods by which a sufficient reserve of skilled labour can be built up rapidly. Czechoslovakia, for example, is encouraging the organisation within industry of courses designed to give specially selected workers an opportunity to acquire the necessary skills within the shortest possible space of time. Measures to this effect have already been taken, for example, in the chemical and textile industries, where the shortage of labour is particularly serious. In France, the Young Workers' Voluntary Service was reorganised early in 1946 so as to direct its efforts towards vocational training, particularly for the undermanned public works and building industries. The new methods, which are carried out under the authority and super-

[1] Fédération Générale des Travailleurs Belges: *F.G.T.B.*, 25 May 1946.
[2] *Ministry of Labour Gazette*, Sept. 1946, p. 156.

vision of the Divisional Inspectors, are based on three stages: vocational selection prior to training; initial training, this being a stage of pre-training carried out at the Centres; and accelerated training for pupils considered suitable for a more extensive training than that given "on the job".[1] A very detailed programme for the stages of initial and accelerated training for the public works and building industries has been drawn up by the Ministry of Labour, and measures to organise accelerated vocational training have also been taken for other branches of industry such as the mechanical and electrical trades, the metal industries, mining, etc.[2] An order of priority has been laid down for the development of these centres so that industries essential to economic recovery can be provided with sufficient manpower at an early date.[3] The organisation of vocational training is not being left to chance in Belgium either; the fund for the maintenance of unemployed workers is expressly charged with promoting the establishment of retraining centres for those industries in which workers are most in demand.

Although vocational training must in the first instance call for programmes at the national level, it is a field in which international collaboration may in certain cases play a useful part: for example, the I.L.O. Recommendation of 1939 concerning vocational training advocated "regional, national and international exchanges of students who have completed their training . . . so as to enable them to acquire wider knowledge and experience".[4] Although such exchanges have not so far been made on any large scale, it is worth mentioning the steps taken by various countries of Eastern Europe to send groups of technicians to complete their training in other countries. For example, 3,000 young Yugoslav workers have been sent to Czechoslovakia for a two months' course in Czechoslovak industrial undertakings.[5] In addition to the assistance obtained in this way by Czechoslovakia towards the solution of her manpower crisis, this scheme will be of great importance to the industrialisation programme in Yugoslavia, in providing that country with a nucleus of skilled workers. Similarly, a party of Czechoslovak technicians has been sent to the U.S.S.R. to study methods of house building.[6] France and Switzerland have also

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[1] Cf. *International Labour Review*, Vol. LV, Nos. 3-4, Mar.-Apr. 1947, p. 298.

[2] *Circulaire M. O. 29/46* of 7 Mar. 1946 and *M. O. 46/46* of 1 Apr. 1946, issued by the Ministry of Labour and Social Security. For the mining industry, the general report of the *Commissariat General du Plan* recommends the creation of a training centre to ensure proper utilisation and maintenance of the new machinery introduced by modernisation.

[3] *Revue française du travail*, 4 July 1946.

[4] Cf. I.L.O.: *Official Bulletin*, 21 Aug. 1939, p. 47.

[5] *Czechoslovak Economic Bulletin*, No. 51, 3 Oct. 1946.

[6] *Prague News Letter*, 7 Sept. 1946.

recently reached agreement on exchanges of students. The new agreement, which is an improvement on the one in force before the war, includes agricultural establishments [1] and raises the number of students to be received by the two countries from 125 to 500.

Other Measures to Increase Productivity

Vocational training is only one of the measures by which an increase in productivity can be obtained through improvement in the quality of the work done; and other measures for the same purpose have already been taken or are at present under consideration. In addition to general economic and technical factors such as organisation and production methods, general working conditions also have their effect on output and several countries have taken steps to improve them. In many cases, indeed, the measures examined above, though primarily designed to encourage recruitment for certain industries by granting specially favourable treatment to the workers employed in them, are also intended to increase productivity; for example, the extra rations given to miners in Belgium are intended not only to attract new workers into the mines but also to ensure their proper nourishment for the particularly heavy work which they have to do. In France, the Manpower Committee has made a detailed study of measures likely to increase output through improvements in working conditions (such as adapting the work to the abilities of the workers, providing proper nourishment, improving surroundings, and supervising the safety and health of workers, etc.) and in social conditions (joint consultation, extension of social services, and guarantees that any increase in productivity will be to the definite advantage of the worker and lead to a real raising of his standard of living).[2] In Czechoslovakia the Two-Year Plan is to include improvements in working conditions designed to increase the output per worker; it is anticipated that a comprehensive system of piece-work payment will be introduced in order to encourage workers to make the greatest possible effort.[3] The accent is everywhere laid on a rational organisation of work to economise manpower, not only in the workshop but also in the administrative grades and in distribution.

Such, in broad outline, are the measures which have been taken in various countries to increase the available labour force, to ensure its distribution according to the needs of the national economy, to develop vocational guidance and training, and to maintain a high

[1] *Circulaire M. O. 131/46* of 25 Nov. 1946 issued by the Ministry of Labour and Social Security.

[2] *Op. cit.*, p. 19.

[3] Jan ROUBAL, *op. cit.*, p. 38.

level of productivity. In many cases, however, even after calling on all available reserves among those not yet gainfully employed, there will still be too few workers to satisfy the needs of production. Furthermore, though the population can be asked to make a special effort to set the national economy on its feet again, it would be difficult to maintain this maximum effort over a long period, not only because of the strain it would involve, but because an effort of this kind cannot be demanded over a long period from certain classes of workers such as married women and older workers. It is therefore necessary to turn to immigration as the only means of obtaining, on a permanent basis, the manpower required.

Migration

There are two important countries in Europe which at the present moment have a surplus of manpower, Greece and Italy; in both countries there is mass unemployment. This is only an accentuated form of a disease which was chronic even before the war, and is not a temporary phenomenon caused by post-war difficulties. In Greece, unemployment particularly affects intellectual workers, builders, miners, labourers and workers in the tobacco industry.[1] In Italy, where the number of unemployed is estimated at about 2 million, the distribution is as follows: industry, 55.2 per cent.; agriculture, 22 per cent.; commerce, 7.3 per cent.; other trades, 15.5 per cent.[2] Emigration is therefore a possible solution in Greece and Italy for the problems with which these countries are faced.

Italy has stated her position quite clearly on several occasions [3], but insists on the necessity of organising the emigration of Italian workers so that they shall not encounter difficulties abroad and so that the country shall enjoy the maximum advantage of such emigration, for example, in the form of payments made by workers to their families in Italy. In addition, as was pointed out by a representative of the Italian Federation of Labour, controlled emigration allows the Government to prevent various categories of workers from leaving the country, *e.g.* workers in the textile and metal industries [4], who might be essential for the reconstruction and industrial revival of the country.[5]

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[1] Statement by Mr. Stratos, Government delegate for Greece, at the 29th Session of the International Labour Conference, Montreal, Sept.-Oct. 1946.

[2] Information given to the International Labour Office by the Italian Government.

[3] For example, in the speeches of Mr. Sittorio, workers' delegate for Italy, and Mr. Marcelletti, Italian Government technical adviser, at the 29th Session of the International Labour Conference, Montreal, Sept.-Oct. 1946.

[4] *Italiani nel Mondo* (Rome), 10 Sept. 1946.

[5] *Il Lavoro* (Rome), 30 June 1946.

Nor can the receiving countries afford to neglect the importance of supervising immigration, as only thus can they ensure that they are obtaining persons who are suitable from the physical and occupational points of view. This is a point on which the trade unions are insisting, since they consider that only when each worker is provided with a contract of employment guaranteeing him certain conditions, established in advance by the authorities in both the country of immigration and the country of origin, can the national labour force be protected against the risk of competition from foreign workers. In this connection it may be pointed out that in the agreements reached between Italy and Belgium, Czechoslovakia, France, Great Britain and Switzerland, and in the negotiations now in progress with Sweden, the trade unions concerned have in every case been consulted. Governments have understood that the co-operation of the unions was essential to the success of the proposed immigration.

Migration Treaties

Several countries have already made agreements with Italy relating to the organised migration of Italian workers.[1] Belgium is to admit 50,000 Italians for coal mining. France made a first agreement on 22 February 1946 for the immigration of 20,000 workers for underground work in mines, and new negotiations have now resulted in a treaty for the entry of 200,000 Italians into France during 1947.[2] Czechoslovakia admitted 10,000 Italians workers for reconstruction work during 1946 [3] and has recently signed a new treaty for the immigration of 2,000 agricultural workers, 2,000 miners, 500 railwaymen, 250 metal workers and 250 quarry workers.[4] Poland has also made an agreement to the same effect and is encouraging immigration of Italians in order to overcome the shortage of manpower in the coal mines.[5] Great Britain and Italy have made an agreement to organise the temporary immigration of 2,800 Italian metal workers.

Every one of these agreements insists on the principle of medical and technical selection of immigrants. The two Franco-Italian agreements and the Belgian-Italian agreement provide that workers shall be given a double medical examination, by the Italian authorities on the one hand and by the French or Belgian authorities on

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[1] In this article only treaties between European countries have been considered. It is however interesting to note that the Italian Government is also in process of negotiating bilateral treaties with certain South American countries and that a treaty was signed in February 1947 with the Argentine Government, comprising more or less the same provisions as those in the treaties with European countries.

[2] Cf. *International Labour Review*, Vol. LV, No. 5, May 1947, pp. 395-462.

[3] *Italiani nel Mondo* (Rome), 10 Feb. 1946.

[4] *Prague News Letter*, 3 Mar. 1947.

[5] Communication from the I.L.O. Correspondent, Warsaw.

the other. The first Franco-Italian agreement, as also the agreement with Belgium, did not have any serious technical selection in mind ; in fact, since it was only a question of recruiting men for underground work in mines without demanding that they should be professional miners, it was sufficient to make sure that they were of suitable age and physique. The second Franco-Italian agreement which relates not only to miners, but also to workers of other trades, provides for a permanent joint committee, with headquarters at Rome, to be responsible for settling conditions of age, health and vocational aptitude for each category of employment and for supervising the execution of the agreement. Furthermore, the Italian and French workers' organisations are represented at the recruitment centres in both countries. The Anglo-Italian agreement makes the Italian authorities responsible for the recruitment of migrants with the desired experience ; a United Kingdom representative will subsequently select, on the basis of their technical qualifications and the results of a medical examination, 2,800 metal workers, 800 of whom are to be skilled workers.

In the matter of living and working conditions, the Belgian, Czechoslovak, French and United Kingdom Governments have undertaken to provide immigrants with housing and to guarantee them, as far as food supplies, insurance, social security and wages are concerned, treatment not less favourable than that given to their own citizens. According to the first agreement with France, and the agreements with Belgium, Czechoslovakia and Great Britain, the immigrant's contract of employment is to be signed before his departure ; but in order to avoid the uncertainties to which this procedure might give rise as regards the relations to be established between the worker and his employer, the second Franco-Italian agreement provides that on leaving Italy the worker receives a schedule of the occupations in which there are vacancies and a model contract of employment in both languages. The contract proper is signed in France and specifies working and living conditions offered to the worker. In this way he is fully informed before his departure, and guaranteed a job suited to his abilities. The agreement with Belgium provides that, to help Italian miners to settle down, the Italian Government shall appoint in each of the five Belgian coalfields a reliable person selected from within the trade union organisation, to represent the interests of his fellow countrymen in Belgium. In France, problems likely to arise during the settlement and employment of Italians are to be referred to a Permanent Technical Committee composed of representatives of the two Governments and of the French and Italian workers' organisations : the Committee is to meet in Paris at the request of either the Italian or the French authorities.

The agreements generally provide that the immigrant shall not have to pay his travelling expenses, which are borne by the receiving country. In many cases a transfer bonus is paid to the workers when they arrive in the country of immigration; in France this is at the rate of 2,000 francs for miners and 1,000 francs for other workers; in Great Britain workers are given 24*s.* 6*d.* on arrival and each time that they are required by the United Kingdom Government to change their place of work. They are also provided with clothing on their arrival, and a repatriation allowance is to be paid when they return home.

What distinguishes these agreements from ordinary migration treaties, which are mainly concerned with protecting the individual migrant, is their economic aspect. This is of very great importance from the point of view of reconstruction in Italy and has, incidentally, given rise to long discussions, especially with France. The agreements reached between Italy and Belgium, Czechoslovakia, France and Poland provide that Italy is to receive certain quantities of coal; the Italo-Czechoslovak treaty specifies that instead of transferring workers' savings, Czechoslovakia is to deliver 77,000 tons of coal to Italy each year.[1] This should not, however, be considered as a mere act of barter, but a measure of co-operation, and a part of the general framework of the reconstruction programmes in these countries.[2]

On the other hand, special arrangements have been made to cover the transfer of workers' savings to their families in Italy. The application of the provisions of the first Franco-Italian agreement gave rise to a number of difficulties owing to the slowness with which payments were made, and the number of Italian immigrants arriving in France was disappointing. The second agreement simplified the procedure considerably; the transfer of wages can now be made through a bank or post office, and the sum which may be sent home is considerably increased. Family allowances are paid to the families of workers in Italy during the time that their settlement in France is recognised to be impossible.[3]

The Belgian Government has not at any time placed obstacles in the way of the direct transfer of Italian miners' savings, and family allowances are paid to the families of miners whose children are living outside Belgium. It is even provided that recoverable advances on wages may be made to migrants before they leave

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[1] *Prague News Letter*, 3 Mar. 1947.

[2] Statement by the Italian representative to the Permanent Migration Committee (Montreal, Aug. 1946). For an account of the first meeting of the Committee, see *International Labour Review*, Vol. LV, Nos. 1-2, Jan.-Feb. 1947, pp. 98-108.

[3] For further details, see "The Franco-Italian Migration Agreements", *International Labour Review*, Vol. LV, No. 5, May 1947, pp. 395-402.

Italy, to assist them in fitting themselves out.[1] The Anglo-Italian agreement includes provisions of the same kind; workers can send their savings home each month so long as they do not exceed a certain amount (£15 for immigrants with families, £7 10*s*. for those without). The British Government will, however, give favourable consideration to transferring the remainder of their savings when they return to their country. When the migrant leaves the collection centre, the sum of £3 is paid to his family. Finally, the British Government undertakes to pay the Italian Government 10*s*. per month for each worker employed in the United Kingdom to maintain his rights to social insurance in Italy.

Less information is available concerning movement of workers between Central and Eastern European countries. Czechoslovakia is known, however, to have negotiated agreements with Bulgaria and Rumania for the employment of Bulgarian [2] and Rumanian [3] workers in agriculture in Czechoslovakia; and Czechoslovakia, like Poland, is preparing to admit Italian immigrants. In addition volunteer workers' brigades have on several occasions given their assistance to reconstruction countries other than their own; brigades of young Bulgarian, Czech, Greek and Hungarian workers have in this way taken part in the laying of a railway track in Yugoslavia, and a Russian brigade has done the same in Czechoslovakia.[4]

Deportation and Repatriation

Up to the present however, it does not seem that Central and Eastern European countries have any intention of resorting to foreign immigration on a large scale in order to meet their labour shortages. It is, in fact, one of the main objectives of their population policy at the present moment to expel foreign elements of their population and recover those of their citizens who had emigrated to other European countries before the war, or who are now living abroad as a result of the mass transfers of population carried out by the Germans.

In Czechoslovakia some 87,438 Germans were compelled to leave their jobs between 1 January and 1 August 1946 [5], and between this last date and 1 October 1946 the number of Germans employed in the frontier regions fell from 196,370 to 80,329.[6] An agreement was signed with Hungary on 27 February 1946 for the transfer of Hungarian elements in Czechoslovakia and the return of Slovaks

[1] *Le Peuple* (Brussels), 28-29 July 1946.
[2] *Czechoslovak Economic Bulletin*, No. 48, 12 Sept. 1946.
[3] Communication from the I.L.O. Correspondent, Warsaw.
[4] *Prague News Letter*, 10 Aug. 1946.
[5] *Czechoslovak Economic Bulletin*, No. 54, 24 Oct. 1946.
[6] *Idem*, No. 59, 28 Nov. 1946.

living in Hungary. To make up the loss of manpower caused by these departures, the Czechoslovak Government has concluded agreements with the U.S.S.R., Hungary, Rumania, Belgium and France to organise the return of Czechoslovaks abroad, and negotiations to this end have also been initiated with Yugoslavia and the Allied military authorities in Germany. Czechoslovakia hopes in this way to obtain some 150,000 " re-migrants " in the near future. They will for the most part be absorbed in the frontier regions formerly inhabited by Germans, mainly in industry, arts and crafts, and agriculture. The Ministry of Agriculture is keeping 200,000 hectares of land in reserve for the settlement of repatriated Czechoslovak citizens. [1]

Poland has also carried out mass deportations of Germans, and is now organising the return of her own citizens to make up her labour shortage and repopulate the newly acquired territories, in which most of the German population used to live. Most of the repatriated Poles are farmers and agricultural workers from the Ukraine, White Russia and Lithuania. Poland however, like Czechoslovakia, attaches great importance to the return of her miners from France, Western Germany and Rumania ; the repatriation of such workers has been entrusted to a new department for the re-migration of Polish miners and recruitment of foreign workers.[2]

Prisoners and Displaced Persons

To the foreign manpower available to countries which are short of labour, we might add the reserves constituted by non-repatriable displaced persons and German prisoners of war ; but difficulties of a political nature have obstructed the employment of both these classes of workers. However, in view of the seriousness of the crisis it would hardly be possible to renounce this potential source of manpower represented by prisoners and displaced persons. The report of the French Planning Staff takes into account the possibility of recruiting workers from this source, though without specifying any number[3], and emphasises the necessity for careful selection of candidates.[4] In the Netherlands, in spite of difficulties in recruiting manpower for the mines, the Government has declined to call on prisoners of war [5] ; the German frontier workers who used to work

[1] *Idem*, No. 32, 23 May 1946, and No. 44, 15 Aug. 1946.

[2] Communication from the I.L.O. Correspondent, Warsaw.

[3] *Op. cit.*, page 79. German prisoners form a substantial part of French manpower. In August 1946 they totalled 500,000, distributed as follows : 250,000 in agriculture ; 56,000 in power (coal mines, electricity, gas and liquid fuels) ; 12,000 in metal trades ; 7,000 in transport and communications ; 10,000 in building materials industry ; 120,000 in building and public works ; and 55,000 in miscellaneous industries. (*Ibid.*, page 5.)

[4] *Ibid.*, pp. 27-28.

[5] *Het Vrije Volk*, 6 Dec. 1945.

in the Limburg mines are now considered as civilian internees, and are housed in groups and formed into all-German teams working in special pits reserved for them alone. Even in this case, therefore, the employment of German manpower is regarded as a matter for extreme caution. In Czechoslovakia, only small numbers of German prisoners have been employed; for example 4,000 prisoners were to be set to work in the Ostrava mines[1], but many have already been liberated.[2] Furthermore, since the whole policy of the Government aims at eliminating the German element of the population, there is no question of having resort to prisoners on a permanent basis to remedy the manpower shortage. The same is true in Poland. Nevertheless, a number of countries have clearly declared their intention of employing displaced persons; Belgium has recently made an agreement with the American authorities for 20,000 displaced persons to enter Belgium as miners and to bring their families, as replacement for liberated prisoners of war[3], and in Great Britain it is intended to employ Poles who are now in the country and do not wish to return to Poland, and to recruit workers among displaced persons on the Continent.[4] Furthermore, the employment of prisoners of war on the land in Great Britain seems to have been fairly satisfactory, and steps have been taken to keep such workers for as long as the shortage of manpower makes this desirable.[5] France has already begun the recruitment of miners and agricultural workers in the French occupation zones of Germany and Austria, and has started negotiations for the conclusion of an agreement for recruitment in the American and British zones. She is also considering the recruitment of German nationals.

Brazil and Venezuela have sent missions to Germany and Austria to examine the possibility of recruiting displaced persons wishing to migrate to South America.

In view of the extent of the manpower shortage and its apparent incurability in a number of countries, an increased flow of migration is to be expected in the next few years. France, for example, in her manpower budget for 1947 has to count on 380,000 immigrant workers, of whom 85,000 are to come from Algeria, 45,000 are anticipated from individual immigration, and 250,000 from organised immigration.[6] As has been seen above, 200,000 workers are

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[1] *Czechoslovak Economic Bulletin*, No. 32, 23 May 1946.

[2] *Idem*, No. 65, 23 Jan. 1947.

[3] *Parliamentary Debates, House of Commons*, Vol. 433, No. 56, 26 Feb. 1947, cols. 2065-2067; *La Cité Nouvelle* (Brussels), 16-17 Feb. 1947; cf. also *International Labour Review*, Vol. LV, No. 5, May 1947, p. 436.

[4] *Economic Survey for 1947*, p. 28; cf. *International Labour Review*, Vol. LV, No. 5, May 1947, p. 447.

[5] *Manchester Guardian*, 19 Mar. 1947.

[6] COMMISSARIAT GÉNÉRAL DU PLAN: *Rapport général sur le premier plan de modernisation et d'équipement*, p. 83.

to come from Italy under collective migration plans, but France will nevertheless have to maintain her efforts if she is to obtain the rest of the manpower she needs. In the same way, every other country, as soon as its national manpower reserves have been exhausted and maximum productivity achieved, will be obliged to look abroad for immigrants to make up shortages.

For the moment, the chief difficulties in the way of increased migration are political and economic; political difficulties in the employment of German prisoners of war and displaced persons; economic difficulties in the organisation of collective migration. It is difficult to forecast whether the first type of difficulty can be overcome, but it is clear that in most cases the employment of prisoners as free workers and of refugees will not be considered except as a last resort, after all other sources of immigration have been exhausted. In the case of the economic problems arising from migration within Europe these, as has been seen, are in process of solution. It is to the advantage both of the receiving country and the country of origin that movements of workers should be supervised, and that steps should be taken to ensure that workers entering the country should have the physical and vocational capabilities required, since economic advantages provided for in the bilateral agreements, such as the transfer of wages and payment of family allowances, which allow these countries to acquire foreign currency, are only guaranteed to workers who emigrate under organised migration schemes. It is therefore probable that both receiving countries and countries of origin will make wide use of such bilateral treaties in order to resolve their manpower problems.

Mention should also be made of the attempt made by the States of Northern Europe to organise migration among themselves on a multilateral basis, by the proposed convention drawn up in September 1945 at a meeting of the Ministers of Social Affairs of Denmark Finland, Iceland, Norway and Sweden, in which the countries of Northern Europe undertook to co-operate through their respective employment services in ensuring an effective clearing between themselves of employment supply and demand, and to guarantee to the nationals of the other contracting countries working on their territory equality of treatment in the matter of social legislation. By November 1946 the proposed convention had only been ratified by Sweden, but the Governments of Sweden and Denmark signed an agreement on 19 December 1947 embodying the provisions of the proposed general convention.[1] These agreements are a pioneering effort of extremely great interest: the exchange of information on the employment situation through a central committee will make

[1] Cf. *International Labour Review*, Vol. LV, No. 5, May 1947, p. 394.

it possible to undertake far-reaching studies on manpower supplies and requirements in the countries in question, and to ensure a smooth and advantageous distribution of labour. The uniformity of working conditions guaranteed to nationals of all the contracting countries will facilitate the free movement of workers, though at the same time supervision by a joint committee, composed of representatives of the employment services of each of the Northern countries, will prevent this upsetting the equilibrium of the employment market in any individual country.

Conclusions

Shortage of workers has obliged European countries to pay attention to the importance of manpower in economic revival. Manpower has been given a special place in all reconstruction plans, and even in countries where no general measure of this kind has been drawn up, anxiety to find sufficient reserves of manpower has been expressed in various measures covering particular aspects of the problem. The scale of the crisis is only equalled by the complexity of the solutions proposed, some of which are based on a numerical increase in the working population, while others aim at improving its occupational standards; others again are based on a more extensive and efficient use of the available manpower.

One of the first concerns of most of the countries suffering from the crisis has been to establish a Manpower Budget, setting out the probable needs of the economy as a whole and the way in which workers should be distributed between the various sectors of industry, and indicating the degrees of vocational skill required. Moreover, these budgets indicate in a general way the broad lines of the manpower policy to be followed: the French budget, for example, contains estimates of the number of workers it should be possible to recover for the directly productive sector of industry, from the army and the public services, among women and older workers, and from abroad. The United Kingdom budget also indicates the various methods by which the country expects to obtain the additional manpower required. Taking such general directives and statements of aims as a base, it is possible to formulate an over-all policy in harmony with the previously established economic objective and so avoid the hazards which empirical measures often run into when nothing more is attempted than to overcome difficulties as they arise. It is no exaggeration to say that the manpower budget constitutes an essential part of any economic plan, and that it is the foundation of every manpower policy at present being applied in the various countries.

Recruitment, vocational training and the rational distribution of workers represent the three main stages of any manpower policy, and may be considered from both the national and international viewpoint. National measures endeavour to adapt the labour force to the tasks before it, and involve reorganising the employment market both numerically and structurally. To do this, it is essential that there should be central supervision over the whole labour force, and that the State should be in a position to influence living and working conditions and to organise vocational training so as to encourage the recruitment of new workers among those parts of the population which have not hitherto been gainfully employed. Up to the present, systems of compulsory mobilisation and direction of labour have remained few in number and have only been enforced to any extent in one or two countries of Eastern Europe ; but the State is everywhere being given a new function, that of encouraging workers, by according them special advantages, to distribute themselves voluntarily among the various occupations and sectors of industry in accordance with the best interests of the national economy.

International measures mainly concern the organisation of migration. As has been seen above, certain countries have arranged exchanges of students for the purpose of vocational training, but this is only a question of small-scale movements on a purely temporary basis. The migration treaties themselves are concerned more directly with the recruitment of workers and, to the extent that workers are selected for certain particular industries in the receiving country, with their distribution. One of the most interesting aspects of the organisation of migration within Europe since the war is the very great importance attached to the technical and physical selection of immigrants, by means of which the receiving countries can be sure of obtaining the kind of workers they require, who will not compete with the national labour force ; technical selection therefore implies international co-operation in the application of national manpower policies. It also calls for a closer supervision of the movement of workers ; the form of such supervision is naturally laid down in the bilateral agreement, and the country of origin, which is in a strong position owing to the urgency of the manpower needs of the receiving country, is able to guarantee that the interests of its workers shall be protected. The various agreements which have been made therefore contain very similar clauses covering the working and living conditions of workers abroad, and arrangements for transmitting their savings to the country of origin.

In this respect the proposals of the Permanent Migration Committee, made at its meeting in Montreal in August 1946, are worthy of quotation. The resolution on the second item on the agenda

invites the Governing Body of the International Labour Organisation *inter alia* "to place on the agenda of the second session of the Permanent Migration Committee, with a view to the subsequent consideration of the question by the International Labour Conference, the question of a model agreement for the use of Governments in negotiating conventions and agreements regarding migration". [1]

A model agreement of this kind would not only simplify future negotiations for migration treaties, but would formulate the minimum standards which should govern the conditions under which workers are transferred from one country to another and establish proper machinery for ensuring the execution of the arrangements made. It is of interest to note that at the present time uniformity is in fact being achieved on the questions dealt with in the various bilateral agreements; if this were not so, indeed, competition between the receiving countries would turn to the disadvantage of those offering less favourable conditions. It therefore seems probable that this tendency will continue to develop in future migration agreements; and that detailed regulation of migration movements, both from the point of view of recruitment and selection and that of protecting the workers and settling financial difficulties, will continue to develop to the mutual advantage of both sides.

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[1] I.L.O.: Permanent Migration Committee, First Session (Montreal 1946), *Report*, appendix II, para. 5 (*a*).

The Social and Economic Role of Engineers and Technicians

by

J. H. E. FRIED

International Labour Office

The problems of professional workers have had the attention of the International Labour Organisation for many years. As early as 1921, at the request of a French association of engineers and technicians, the Office published a provisional memorandum[1] *on the position of technicians, which subsequently formed the basis of a more detailed enquiry carried out by the Office, in collaboration with the Committee on Intellectual Co-operation of the League of Nations, on the status and employment of engineers and chemists in industry.*[2] *In 1928 the Governing Body set up an Advisory Committee on Professional Workers which held seven sessions up to 1939 and considered such questions as the recruiting and placing of professional workers, equality of treatment for nationals and foreigners in respect of professional work, collective agreements for journalists and the protection of professional titles.*[3] *At the recent 101st Session of the Governing Body it was decided to set up, on a tripartite basis, an Advisory Committee on Salaried Employees and Professional Workers.*[4]

The following article, on the present position of engineers and technicians and their part in the execution of social policies, is based on a paper prepared by the Office for the International Engineering Congress (Congrès technique international) *held in Paris in June 1946.*

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[1] I.L.O. : *Memorandum on the Position of Technicians* (Geneva, 1922).

[2] *Engineers and Chemists : Status and Employment in Industry :* I.L.O. Studies and Reports, Series L (Professional Workers), No. 1 (Geneva, 1924).

[3] Cf. *The International Labour Code 1939* (Montreal, 1941), pp. 687-699 ; and "Remedies for Unemployment among Professional Workers", *International Labour Review*, Vol. XXXIII, No. 3, Mar. 1936, pp. 304-336.

[4] *Idem*, Vol. LV, No. 4, May 1947, p. 412.

THE URGENT and challenging task of the post-war era is to tranlate into reality what has been made possible through the constant progress of technology. In the accomplishment of this task, engineers and technicians have an important and often decisive part to play.

Technical developments are going on in industry all the time; everywhere numerous engineers and technicians are constantly engaged in finding new and improved methods of production, and the range of their activities is constantly widening. The effects of these developments in production methods are far-reaching. One has but to consider the example of the mechanisation of agriculture, which promises to do away in time with the chronic state of hunger to which large parts of the world have hitherto been subjected, and which must also change profoundly the conditions of life and work and the social structure of agricultural workers, who still form the largest section of the population of most countries. Changes in production methods bring about changes in consumption and distribution, in employment and population movements, in exports and imports.

Realising this intimate connection between technical developments and social and economic changes, Governments have carried out exhaustive official investigations during the last decades in order to furnish the background information for adequate legislative and governmental action. These investigations have shown the repercussions of technological changes to be so great that all countries are considering how technological development may be directed in such a way as to ensure the achievement of desirable social ends —above all, how to combat technological unemployment and attain full employment.[1]

The most direct approach to the problem is to distinguish between ends and means, to acknowledge that technology is a means and that social and economic progress is the end. The first task, then, is to establish in broad outline what are the desirable economic

[1] For the U.S.A. cf. the report of the President's Committee on Social Trends, set up in 1929: *Recent Social Trends in the United States* (New York, 1933); the report of the National Research Project: *Re-employment Opportunities and Recent Changes in Industrial Techniques*, published since 1933; the report of the Science Committee of the National Resources Committee: *Technological Trends and National Policy, Including the Social Implication of New Inventions* (1937), summarised in *Technology and Livelihood* (New York, 1944) by M. L. FLEDDÉRUS and M. VAN KLEECK; and the reports issued since 1938 by the Temporary National Economic Committee, and since 1939 by the National Resources Planning Board. All of these very detailed investigations were carried out with the assistance of outstanding experts, including scientists and engineers. Under the Employment Act of 1946, the President submits to Congress every year, beginning in 1947, an Economic Report on current levels and foreseeable trends of employment, production and purchasing power, and proposes a programme "to promote maximum employment, production and purchasing power".

goals; the technological means of achieving those goals can then be determined. It is almost universally agreed that social and economic progress depends largely on technical progress; but there is also a growing belief that the development of technology can and must be largely directed by social considerations. There is an increasing tendency to repudiate the notion that technological development is a blind force ungovernable by man. What machines and what industries shall be developed, what production methods shall be prohibited, what raw materials shall be used, what type of research shall be stimulated or discouraged—these questions are now considered to be of national—and often international—concern, and therefore to be decided, or at least influenced, by the community as a whole, or by international agreement. Technical development is valuable in so far as it promotes the legitimate aspirations and the welfare of the community. In other words, the technological system must be regulated by choices based on considerations of social desirability and by the realisation of the need for international co-operation.

This, in a very approximate way, is what is meant by the "planning" or "social engineering" which is now going on in many countries, particularly in those confronted with the huge tasks of reconstruction. In the countries which have not directly suffered from the destruction of war, there is also a growing awareness that deliberate action must be taken against the hazards of the industrial system (such as technological unemployment; underpayment, job insecurity and the drabness of life of the worker; uneven use of resources and uneven economic development which leads to "scarcity in the midst of plenty, or potential plenty"; etc.). The increased sense of urgency with which these problems are now considered is due partly to the complexity of present-day industrial society, but also partly to the belief that present-day technology is able to master these problems. Few would deny that the immediate evils of the earlier stages of the industrial era were greater than those of the present stage; and that the development of technology, while increasing the dangers that might result from mismanagement, provides unparalleled possibilities.

What is, in view of this situation, the position of the engineers and technicians as professional groups? Firstly, for the successful solution of the great tasks which have been briefly outlined, the advice and collaboration of the engineers and technicians is indispensable, as is, on the side of the latter, a full understanding of their social and political responsibilities. Secondly, however much the problems and tasks of engineers and technicians of the various countries differ, they "speak the same language". Their methods of work and investigation, their professional standards and ethics

and their social and economic interests are fundamentally identical. However, engineers have suffered from specialisation and insufficient contact among themselves ; they have also suffered from insufficient contact with other groups, as much as other groups have suffered from lack of contact with technical experts. Finally, it must always be remembered that engineers and technicians are not only the creators of, but are also themselves conditioned by, the course and application of technology, and that their own activities contribute as much to shaping their own lives as to shaping those of their fellow citizens. This is particularly so because the large majority of engineers and technicians belong to the employed group. They are givers, but also receivers, of orders. Legislation and practices concerning industrial relations, collective bargaining, salary scales, etc., are of immediate importance to them and their families ; they are covered by social insurance schemes ; they are liable to suffer from adverse working conditions and unemployment, and to gain from favourable working conditions and full employment ; in brief, their fate is tied up with that of the community as a whole and they are as directly interested as any other group in property and progress.

Hence it is the opinion of competent observers in many countries that the engineers and technicians must, more than hitherto, be integrated in social and political life, both on a national and on an international scale.

The close inter-relation of the work of engineers and technicians with general social factors and economic policies can perhaps best be shown by a brief discussion of topics which at present are the focus of attention.

The Increased Emphasis on Research

Technological development has been very uneven ; research has been pushed forward in particular fields and neglected in others ; application of new knowledge has been widespread in certain countries or areas or industries but not in others ; all too often, the population at large has not profited sufficiently from scientific and technological progress. In short, achievements have lagged behind potentialities. It has been found difficult to integrate the economic and social techniques with the productive techniques.

As far as technological research is concerned, present trends appear to be as follows :

(1) The most conspicuous fact is the greatly increased amount of systematic research which is being undertaken and planned, both in the field of pure research, *i.e.*, " investigation carried on with the single motive of acquiring new knowledge ", and applied research,

namely studies for the purpose of improving products and production methods and of developing new ones. It is increasingly realised that investigation into seemingly "abstract" problems may have the most far-reaching concrete results.

Hence, there are no strict boundary lines between research and production engineering, which has aptly been called "the last stage of the transmutation of ideas into reality"; just as there are none between production engineering and "operation", that is, the actual organisation of the productive process.

(2) The growing emphasis on research considerably widens the field of the engineering profession; it improves the employment prospects of engineers and increases their influence on the life of the community.

(3) Systematic experiment and research require ever more complicated and more costly machines and equipment. The funds needed to carry out modern research are so considerable that in most countries it is being publicly financed or subsidised in one form or another.

(4) First-class research can, in most instances, be carried out only by team-work. The individual researcher who works in isolation is becoming more and more the exception.

(5) While industrial undertakings are extending their research, an increasing amount of research is being carried out by universities and scientific institutions.

(6) At the same time the workers are becoming more interested in research. It is, for example, characteristic that in 1945 the British Trades Union Congress adopted a resolution calling upon the Government to set up a National Development Board which would include scientific and technical experts and representatives of trade unions, with a view to developing to their fullest capacity the country's natural resources and industries, and demanded the establishment of a scientific advisory committee of the Trades Union Congress.[1]

(7) The need for intensification of systematic research is realised also in the hitherto less industrialised countries.

(8) Governments are carrying out, stimulating and directing research to an increasing extent. The amount of money spent by the Federal Government of the United States rose from approximately 70 million dollars in 1939, to 706 million in 1944; in the latter year, approximately 30 per cent. of the Government-financed research was carried out by Government institutions, 55 per cent.

[1] Cf. *International Labour Review*, Vol. LII, No. 5, Nov. 1945, p. 563.

by private industry, and 15 per cent. by non-profit-making research organisations.[1]

(9) There has been a pooling of resources between industry, institutions of higher learning, specialised research institutions and Governments. Sometimes this collaboration has transcended national boundaries, and efforts are being made toward an increased exchange of technical experts and scientific knowledge.

(10) Carefully elaborated "plans" or "programmes" for the organisation of research, both on a national and an international scale, are being laid down. Organisations of engineers and individual scientists are taking a keen interest in these matters. The development of atomic research is merely the most spectacular problem in this respect. The form and the extent of this planning are the subject of lively discussion. The various research activities range from the most general to the specific; this factor, among others, leads to the opinion frequently expressed that in fundamental research, planning should be "the servant of the scientists", whereas in applied research the scientist should be the servant of the plan.

The Development of Scientific Organisation of Production

The great need of the present time is increased output. Much attention is therefore paid to the scientific organisation of production and work. This comparatively new field of "scientific management" is being developed by private associations, by management-employee collaboration, by Government initiative, by academic institutions, and by international exchange of experience. Production and management engineers are studying how output is conditioned by the layout and the arrangements of the work place, by the design of tools[2], by the length of the working day, by the monotony or variety of the work, by factors influencing muscular and mental fatigue, by labour turnover, by noise, lighting, ventilation, temperature, etc. Both in the investigation of these problems and in the application of its findings, the engineers have to work in close contact with the experts on labour relations, industrial medicine, vocational guidance, vocational selection and industrial psychology.[3]

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[1] Information from the U.S. Department of State to the International Labour Office.

[2] According to Professor E. P. CATHCART at the conference on "The Place of Science in Society" (Jan. 1945), it was found that the introduction of scientifically designed shovels for carrying coke and iron ore led to an increase of the average amount shovelled per man-day from 16 tons to 59 tons. See *The Advancement of Science*, Vol. III, No. 10, p. 204.

[3] At the recent 25th meeting of the British National Institute of Industrial Psychology, the President, Lord Piercy, attributed the increasing membership of the Institute to "the widespread desire for knowledge on the subject of industrial psychology".

The result of this collaboration has been, in scientific management, an increased use of methods which are typical of the technical sciences, namely experiment, testing, and the reduction of problems to quantitative, measurable terms, while at the same time increased emphasis is laid on the significance of the " intangible ", psychological elements in policies concerning personnel, production and management.

It is well known that workers often look at " Taylorism " with apprehension ; they fear that it is but another name for " speed-up " or similar objectives. In fact, until now " rationalisation " and scientific management have sometimes suffered, not from being too scientific, but from not being scientific enough—namely, from failing to evaluate scientifically the human and psychological element involved in the working process. Taylor himself, contrary to a widespread belief, and unlike some of his followers, was aware of the central importance of the human personality of the worker in scientific management.[1]

This leads to consideration of the relation of engineers and technicians towards the worker, since frequently they are called on to take decisions which directly influence the occupational status of the worker. In smaller enterprises engineers and technicians often assign individual workers to individual jobs ; in larger enterprises they assist the personnel manager or foremen in making such assignments. Also in many other ways they frequently represent the authority of the employer. Labour relations are apt to be considerably influenced by the work and attitude of engineers who deal with matters of scientific management. Job-analysis has acquired great importance. It is being used for many purposes, such as to establish standards for the evaluation of the performance of individuals and groups, and for determining variations in wage and salary rates ; to provide criteria for the hiring and placing of employees, for vocational guidance, and for training programmes outside and inside the plant ; to advise and assist safety services ; to improve management-labour relations by establishing clear-cut, objective standards of productivity ; to make possible exact comparisons between output, working conditions, wages and salaries of employees in different plants, irrespective of different nomenclature ; to eliminate technically or economically useless activities ; to provide a basis for the re-engineering of jobs and for improvements in production and in administrative processes.[2] Thus, modern

[1] Mr. H. S. Person, President of the Taylor Society in New York City, complained that " broadly speaking, the engineer has been indifferent to social problems ; he has been concerned with the technical efficiency of his mechanisms rather than with their social consequences " (*Encyclopædia of the Social Sciences*, Vol. V, p.546).

[2] Cf. *Job Descriptions*, by E. S. HORNING, National Industrial Conference Board : Studies in Personnel Policy, No. 72 (New York, 1946), p. 6 ; and " L'Analyse des Temps dans le Travail collectif ", by G. BÉQUART, *C.N.O.*, May 1946, p. 5.

job-analysis is much more than time study ; to be complete it must examine the following :

(1) What the employee does (analysis of the scope of the particular job, considering all physical and mental activities involved) ;

(2) How he does it (analysis of machinery and implements used and movements made by the employee) ;

(3) Why he does it (what is the activity of the particular employee expected to accomplish ; this is the central part of the job-analysis) ;

(4) The skill involved (knowledge, training and experience required, manual skill, mental application, dexterity, accuracy and personality requirements).[1]

In order to carry out the great tasks of reconstruction ahead it is important that, as far as possible, the right person be given the right job. There is a growing realisation of the fact that labour relations are human relations, and that productivity rises and falls in proportion to the degree to which the legitimate aspirations of the employee are respected.[2] In this connection it must again be pointed out that often engineers and technicians are also personally affected by problems of scientific management and job-analysis. Scientific management and job-analysis are not limited to manual jobs ; and since large numbers of engineers and technicians are assigned to specialised duties according to widely ramified schemes of division of labour, their own work, their personal and professional satisfaction, their promotion and remuneration, are directly influenced by the methods by which their own duties are organised and assigned. [3]

In various countries, notably in Belgium, France, Great Britain, the United States of America and the Soviet Union, questions of

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[1] Cf. U.S. War Manpower Commission : *Guide for Analysing Jobs* (Washington, D.C.) ; *Influence de l'Etude des Temps sur la Production industrielle*, by Lucien Lauru (Paris, 1946) ; " Union Interest in Engineering Techniques ", by William Gomberg, *Harvard Business Review*, Vol. XXIV, No. 3, Spring 1946, pp. 355 *et seq.*

[2] The Declaration of Philadelphia lists among the solemn obligations of the International Labour Organisation, the furtherance " among the nations of the world [of] programmes which will achieve the employment of workers in the occupations in which they can have the satisfaction of giving the fullest measure of their skill and attainments and make their greatest contribution to the common well-being ". Cf. *International Labour Review*, Vol. L, No. 1, July 1944, p. 38. The need for offering proper training to engineers who specialise in scientific management has, for instance, led the French Government to lay down a special study programme at the Conservatoire national des arts et métiers, and to create the title of " social engineer " (*Journal officiel*, 21 Dec. 1945, pp. 8460-8461 ; cf. *International Labour Review*, Vol. LIII, Nos. 5-6, May-June 1946, p. 412).

[3] Concerning the definition and classification of jobs of metallurgical engineers, cf. the detailed *Projet de Convention collective, avec définition et classification des fonctions, présenté par le Syndicat national des Cadres et Ingénieurs de la Métallurgie (C.G.T.)* (Paris, 1946) ; also, " La sélection des cadres supérieurs ", " La formation professionnelle ", and " La formation des cadres " in *18e Cycle d'Etudes de la Cégos* (Commission Générale d'Organisation Scientifique, Paris, 1945).

scientific management have received great attention, but so far there has been little international co-ordination of these efforts. Also, within the various countries, the development has been uneven, some industries having been studied more closely than others. Compelling economic and technical considerations make the further development of scientific management a necessity. Indications are that in this field there is wide scope for engineers and technicians of originality and broad technical and human understanding.

Industrialisation

The greater part of the world's population does not yet live in the "industrial age". The degree of industrialisation achieved differs not only between various countries, but between industries and branches of production within the same country. Even within the industrial countries, productivity per man-hour, standardisation, exploitation of new inventions, research, scientific management and production, and methods of training personnel differ very widely.

Industrialisation is a complicated and delicate task, but the areas which are now developing their industries can build on the experience and accomplishments of other areas where industrialisation has started earlier. The war has shown, if such proof were needed, that under appropriate conditions it is not more difficult to make the jump from the ox-drawn carriage to the airplane than to take the step from the ox-drawn carriage to the primitive steam-engine. According to a recent report, a local firm in Kenya is producing pre-fabricated houses which are put up in one day by a gang of 10 unskilled and one semi-skilled Native workers, and are destined for Africans who hitherto have lived in mud or grass huts.[1] Inhabitants of backward areas have shown remarkable technical abilities and often make excellent skilled workers, mechanics, technicians and engineers. Darwin's law of phase-by-phase development does not apply to the process of industrialisation; the newly developing countries need not repeat the stages through which other countries, because they were the pioneers of industrialisation, had to pass. They can use as models the most modern devices, in the field of engineering as well as in administrative and social techniques.

But, while the second-best is not good enough for the newly developing countries, industrialisation cannot be undertaken without careful consideration of its immediate and long-range effects upon the peoples concerned. Industrialisation is bound to influence deeply the economy, the social and family structure, the living and working conditions, and the ways of thinking and acting of the country concerned. In the past, industrialisation has led to the

[1] *Ethiopian Herald* (Addis Ababa), 11 Feb. 1946.

destruction of existing cultural values without establishing satisfactory conditions in their stead. Stress is now laid on the need for carefully considering the impact of technological changes upon the cultural pattern of the inhabitants and on the need for co-ordinating industrialisation with a positive social policy. Present-day industrialisation programmes aim at preventing haphazard developments, and usually link industrialisation with measures for the modernisation of agriculture, for the improvement of sanitary, housing and health conditions, and for providing greater educational facilities.[1] Industrialisation, it is now agreed, would defeat its own ends if it were to make the people poorer, economically or otherwise. The International Labour Office has always emphasised these points.[2]

The technical expert, as the bringer of the change, is expected to show a great deal of understanding in order to keep to a minimum the undesirable accompanying effects of industrialisation and to assure that the latter are more than offset by genuine advantages. In particular, if technical experts from abroad are carrying out these tasks, their personal attitudes as well as the measures recommended or introduced by them will be a not unimportant factor in international and inter-racial relations; they can be ambassadors of good will, or unwittingly foster resentment and xenophobia.

The Employment and Remuneration of Engineers and Technicians

The economic conditions of engineers and technicians have been influenced, and, it appears, will continue to be influenced by a number of trends, some of which can be traced back to the pre-war period while some have developed during the war and others in the post-war period.

(1) In most industrial countries the number of " white-collar workers " in general, and persons with secondary or higher education in particular, is increasing, whereas the number of manual workers is either increasing at a slower pace or decreasing. For example, in the United States, in 1920, 29.9 per cent. of the gainfully employed

[1] Cf. the French *Plan d'équipement des territoires d'outre-mer*; or, as an example of a programme for a smaller area, " Programme for Ceylon, " *Times of India* (New Delhi), 18 Dec. 1945.

[2] Cf. " Migrant Labour in Africa and its Effects on Tribal Life ", by M. READ, *International Labour Review*, Vol. XLV, No. 6, June 1942, pp. 605-631; " A People's Peace in the Colonies ", by W. BENSON, *idem*, Vol. XLVII, No. 2, Feb. 1943, pp.141-168; *Social Policy in Dependent Territories:* I.L.O. Studies and Reports, Series B, No. 38 (Montreal, 1944); " Conditions of African Employment on the Rand Gold Mines ", *International Labour Review*, Vol. LI, No. 1, Jan. 1945, pp. 56-65; " Migration of Indigenous Workers in the Belgian Congo " by P. de BRIEY, *idem*, Vol. LII, No. 4, Oct. 1945, pp. 335-351; " Some Problems of Labour Law Enforcement in China ", by T. K. DJANG, *idem*, Vol. LIII, Nos. 1-2, Jan.-Feb. 1946, pp. 39-48. Cf. also *China Enters the Machine Age* by KUO-HENG SHIH (Cambridge, Mass., 1945).

persons were in the manufacturing and mechanical industries; by 1940, the percentage had fallen to 23.4; on the other hand, the percentage of workers in clerical service increased from 7.1 in 1920 to 10.2 in 1940; and the percentage engaged in the professional services increased from 4.8 to 7.4.

The impact of technological change is, however, even more striking in agriculture. Increasing mechanisation of agricultural processes makes it possible to produce more with fewer workers. In the U.S.A., 26.2 per cent. of the gainfully employed persons belonged to the occupational group of agriculture, forestry and animal husbandry in 1920. By 1940, the percentage had fallen by almost one third to 18.8. Thus, while in 1920 more than one quarter of the gainfully employed persons in the U.S.A. were working in agriculture or forestry, less than one fifth of them were doing so in 1940.[1]

(2) Among engineers and technicians, the number of self-employed persons has been decreasing[2]; today, the large majority of engineers and technicians are either salaried private employees, or public employees, or members of the armed forces.

(3) In almost all countries, engineers' and technicians' prospects of finding suitable employment are very good; in the industrialised as well as in the less developed countries, the demand for engineers and technicians is greater than the supply. Experts believe that this situation will probably continue for some time. As a result of these circumstances, a larger number of engineers and technical experts than before the war will also be needed for teaching positions in institutions of higher education and in secondary and vocational schools.

(4) On the other hand, engineers and technicians, including the self-employed, were hard hit by the world depression of the 1930's. Engineers and technicians are, therefore, directly interested in the efforts, both on a national and international scale, to secure full employment, and to prevent economic crises and unemployment.[3] In this, as in other respects, the professional as well as the economic interests of the engineers and technicians are identical with the aims and aspirations of the other groups of the population.

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[1] *Statistical Abstract of the United States* (Washington, D.C., 1943), pp. 66-82.

[2] As long ago as 1928 it was estimated that 95 per cent. of engineers in the U.S.A. were in salaried employment. Cf. E. FRASER, *The Story of Engineering in America* (New York, 1928), p. 15.

[3] The International Labour Organisation has devoted much attention to these questions. See in particular the Philadelphia Declaration, *International Labour Review*, Vol. L, No. 1, July 1944, pp. 37-39, and *The Maintenance of High Levels of Employment during the Period of Industrial Rehabilitation and Reconversion*, International Labour Conference, 27th Session, Report II, Paris, 1945 (I.L.O., Montreal, 1945).

(5) Industry has been employing an ever-increasing number, both relative and absolute, of graduate engineers, but as a rule their salaries have not risen relatively to salaries and wages earned by other categories of employees. Salaries of less fully trained technicians have often shown an upward trend, so that not infrequently the income of the higher brackets of technicians are higher than the lower brackets of fully trained engineers.

(6) Owing to the fact that the large majority of engineers and technicians earn their livelihood as salary-earners, they are increasingly and directly affected by collective bargaining, the regulation and improvement of working conditions, hours of work, rest periods, vacations with pay, dismissal pay and periods of notice, social security and social assistance, and similar measures which, with due consideration for the special circumstances of the various groups concerned, tend to improve the economic conditions and living standards of employed persons.

(7) The differences between salaries of young engineers and of older men in higher positions are often very considerable.[1] Salary increases by seniority tend to be slow.[2] Only a comparatively small minority of engineers can reckon upon being promoted to the posts in the upper salary brackets which are characteristic of the executive and managerial positions.[3]

Some competent observers consider the differences between the salaries of the " rank and file " of engineers and of those of the higher

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[1] In 1930, the earned incomes of graduates in engineering of McGill University, Montreal, Canada, were calculated as follows for the first, fifth, tenth, fifteenth and twentieth year after graduation (in Canadian dollars) : $995 ; $2,380 ; $4,300 ; $6,100 and $9,300. These averages are for all classes of engineers, including Government employees, and teachers. The analogous median figures were (in Canadian dollars) : $900 ; $2,100 ; $3,500 ; $4,800 and $6,000 (*Report of the Royal Commission on Technical and Professional Services, 1930*, quoted in a brief submitted by the Engineering Institute of Canada to the Royal Commission on Administrative Classification in the Public Services, April 1946).

[2] After several years of study, the board of directors of the American Society of Civil Engineers adopted in the summer of 1944 a " classification and compensation plan " providing for nine salary grades for engineers, carrying the following salaries for each grade (U.S.A. dollars) : $1,980-$2,400 ; $2,400-$3,000 ; $3,000-$3,600 ; $3,600-$4,700 ; $4,700-$5,160 ; $5,280-$6,480 ; $6,720-$7,920 ; $8,160-$9,360 ; $9,600 and up (*Civil Engineering*, Aug. 1944, pp. 364-366).

[3] An investigation carried out in 1930 among engineers employed in 48 State Highway Departments in the U.S.A. revealed the following numerical proportion between low and high positions : 6,744 junior engineers, 2,792 junior assistant engineers, 2,277 assistant engineers, 640 engineers, and 62 chief engineers. In the first class, 96 per cent. earned between $1,200 and $2,000 ; 88 per cent. of the second class earned between $1,350 and $2,700 ; 80 per cent. of the third class earned less than $3,200 ; in the fourth class, 50 per cent. earned between $2,800 and $4,200, and 43 per cent. between $4,200 and $5,500 ; in the fifth class, about one half earned between $4,000 and $7,000 and one half between $7,000 and more than $8,000 (American Association of Engineers, *Standards on the Classification and Compensation of Professional Engineering Positions* (Chicago, 1939), p. 13). Cf. also *Employment and Earnings in the Engineering Profession 1929-1934*, by A. Fraser, Jr. and A. F. Hinrichs, U.S. Dept. of Labor, Bureau of Labor Statistics : Bulletin No. 682 (Washington, D.C., 1941), p. 235.

posts excessive.[1] It is also pointed out that young engineers, who frequently have to undergo economic hardship during their student years, wish to found a family after having completed their studies and obtained a professional position, but find it difficult to do so because of their comparatively small salaries. Similarly, the incomes of research workers are often considered too modest in proportion to the economic as well as scientific importance of their work.[2]

(8) In some countries fully trained engineers are reluctant to accept positions in productive engineering and its management because these " in the factory " or " on the side " jobs are paid lower salaries than positions in other departments.[3]

(9) Salary and promotion expectations differ from industry to industry within the various countries and therefore well qualified engineers tend to seek employment in some branches of industry rather than in others.[4]

(10) An increasing number of engineers and technicians are employed as civil servants or in other capacities by national and provincial governments, municipalities and other public bodies. In various countries the pay of scientific public employees has been traditionally lower than that of persons with the same qualifications in private employment. Efforts to change this situation and to bring the income rates of scientific public employees up to, or nearly up to, those paid in private employment have been under way for some time and have been accentuated since the end of the war.

Whether remuneration and other conditions of employment of professional men in public service influence those of professional men in private employment, or vice versa, depends on the employment prospects in the various branches of engineering. Specialists in certain fields, for example, bridge building and road construction,

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[1] A well-known American expert on these questions recently wrote, on the basis of lifelong experience : " A greater return for the productive workers, particularly if it resulted in a smaller differential between them and supervisors and executives, would reduce the economic pressure which unmakes scientists. . . . A benevolent despotism controls the scientist and engineer. And it is no more benevolent and no less despotic because it is the rule of a hierarchy composed of his colleagues, the higher levels of whom have power in geometrical progression " (John MILLS, *The Engineer in Society* (New York, 1946), p. 127).

[2] " The obligation of society to these creative workers is obvious and irrefutable, and more of that obligation I should like to see met" (*Ibid.*, p. 106).

[3] *The Report of the Royal Commission on Education of the Engineering Industry* (London, 1931) states (pp. 11-12) : " The bulk of university engineering students who enter the industry are engaged in research, testing, design and salesmanship, rather than in production engineering and its management. . . . The comparative absence of university-trained men on the site merits careful consideration. There is always a danger in the divorce of men with high technical and theoretical qualifications from the practical side of an industry. . . . It will be necessary, if more university students are to be obtained for the works, to show that there are reasonably good prospects in this direction."

[4] Cf. *The Mining Electrical and Mechanical Engineer*, Dec. 1945, p. 236.

are mainly employed by public authorities, and therefore the salary scales of privately employed bridge building and road construction engineers will be largely influenced by the salary schemes paid in public employment; the reverse is true of production engineers in non-nationalised branches of industry.

The influence upon salaries in private undertakings of salary schemes determined by or under the control of Governments [1] will be particularly great in countries engaged in programmes of nationalisation. The schemes and methods of nationalisation vary considerably from country to country and often within the same country from industry to industry. Therefore, the methods by which salaries and other employment conditions of professional persons in these industries are determined will differ widely, ranging from individual bargaining to legislative action. For the same reason their employment status may vary from the secure position of a civil servant to the unstable position governed by a short-term contract, and divergencies will exist with regard to conditions of tenure, promotion schemes, guaranteed increases of salary, old-age pensions, and other conditions of employment. These questions will have an important bearing on the conditions which will prevail in the private sector of employment, and on the other hand the success of the nationalisation programmes will largely depend on the contentment and loyalty of the engineers and technicians working in the nationalised institutions. There are indications that in nationalised industries and undertakings, the economic and employment conditions of professional workers, particularly in the more responsible positions, will be as favourable as, or perhaps more favourable than, those of comparable workers in private undertakings.

(11) It should also be noted that technical developments have led to a great increase in the number of engineers and technicians in the armed forces and in Government agencies dealing with military affairs.

(12) During the war, in practically all belligerent countries, measures were introduced to make the special knowledge of civilian experts available to the public authorities.[2] The favourable experience gained with these methods during the war will perhaps lead to parallel developments in peace time. For example, a recent Mexican law provides that members of the professions may be

[1] Even for the United States of America it is being asserted that " for engineers and their professional colleagues, this scheme of remuneration, after their apprentice progression is finished, tends towards that of the civil service" (John MILLS, *op. cit.*, p. 82).

[2] The " National Roster " of the U.S.A., the compilation of which was begun in 1940 with the collaboration of scientific societies, included nearly half a million scientists, as well as professional men employed in private industry. Cf. U.S. CIVIL SERVICE COMMISSION, 57th Annual Report (Washington D.C., 1941), p. 39.

required to perform "social service," defined as "work performed during a certain period of time and against remuneration in the interest of society and of the State". In these cases the remuneration must be sufficient to maintain a standard of living adequate for members of the learned professions.[1]

(13) There is not complete agreement about the question of whether, and to what extent, the fees and remuneration of professional engineers can and should be standardised.[2] However, in most countries, associations of consulting engineers have established detailed schemes for the remuneration of the members of the profession.[3]

(14) In the main industrial countries, large numbers of engineers and technicians are often employed by a single company. For example, a department of the Bell Telephone Company Laboratories, which a generation ago had seven engineers, now employs several hundred. As a result of this trend, many engineers have to carry out routine jobs which do not utilise all their qualifications. In order to achieve a just level of income and the greatest possible utilisation of talent, a demand is being made for more flexible arrangements in the shifting and promoting of qualified persons.

(15) Employed engineers and, to a lesser extent, technicians are particularly interested in two questions which, as the pre-war discussions and resolutions of the Advisory Committees on Professional Workers and on Salaried Employees of the International Labour Office show, are not altogether simple to solve, either on a national or on an international level, namely statutory or other regulations concerning the permissibility of contractual restrictions of their right to leave the employment of one employer and to carry on their professional activity for another employer (the so-called "radius clause")[4] and, secondly, the rights of employed professional persons in their inventions, public recognition, pecuniary remuneration, patent rights, etc.[5]

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[1] *Diario Oficial*, 26 May 1945 ; cf. *International Labour Review*, Vol. LII, No. 4, Oct. 1945, pp. 408-410.

[2] AMERICAN ASSOCIATION OF ENGINEERS : *Standard on the Classification and Compensation of Professional Engineering Positions* (Chicago, 1939), p. 7.

[3] A particularly clear scheme applies to the remuneration of consulting engineers in Australia.

[4] Cf. resolutions on the subject adopted by the Advisory Committee on Salaried Employees in April 1931 and March 1933, and by the Advisory Committee on Professional Workers in May 1931, and the draft compromise resolution drawn up by the officers of the two Committees in February 1933 ; reprinted in the *International Labour Code, 1939* (I.L.O., Montreal, 1941), pp. 697-699. See also *International Labour Review*, Vol. XIX, No. 3, Mar. 1929, pp. 402-415 ; and No. 4, Apr. 1929, pp. 540-550.

[5] Cf. the resolutions adopted by the Advisory Committee on Professional Workers in December 1929, and by the Advisory Committee on Salaried Employees in April 1931, reprinted in the *International Labour Code, 1939*, pp. 695-697.

(16) The industrialisation of certain areas and countries is likely to offer engineers and technicians economically favourable positions abroad. The extent to which these opportunities will be realised will depend on the regulations concerning the migration of professional workers. It may be noted that, in 1935, the Advisory Committee on Professional Workers of the International Labour Office requested the Organisation " to continue the drafting of international regulations to ensure equality of treatment for national and foreign professional workers in the same way as for manual workers." [1]

(17) With the formation of a network of international agencies, a larger number of professional technicians than before the war will be employed as international civil servants or as international technical experts.

(18) There is a growing tendency among engineers and technicians to form trade unions and organisations working along trade-union lines. The programme of one of these unions declares that " technical employees have never received the remuneration commensurate with their contributions to technical and economic development. The organisation has been formed with the object of securing for all technical employees the standard of living and economic security to which their training and achievements justly entitle them and to raise professional standards and ethics. " Some of these organisations also take an interest in measures intended to broaden the role of the members of the profession in the cultural and social life and in the spread of technical knowledge.

Protection of Professional Standards

In order to maintain high professional standards and to protect the interests of the members of the profession as well as the interests of the community, efforts have been made in varous countries to protect the titles of engineers.

In 1933 the Advisory Committee on Professional Workers of the International Labour Office asked for the securing of " an international agreement by which the different States shall undertake to regulate by legislation the use of engineering degrees and titles granted by universities and technical colleges, the use of such degrees and titles to be forbidden except under conditions authorised by law and established practice". So far, no further steps have been taken in this direction.

In some countries the protection of the title of engineer has met with difficulties, partly because the different academic institutions

[1] *Ibid.*, p. 690.

apply different standards in granting the title, and partly because in English-speaking countries certain categories of technically trained persons without academic education, such as locomotive drivers, are traditionally called engineers.

Engineers have also asked for legislation providing for the official registration of qualified engineers. Such legislation would prescribe that public authorities must, for the execution of engineering jobs of a certain magnitude, employ only registered engineers [1] or may go further and permit the exercise of the profession, in whatever capacity, only to licensed engineers who are active members of some official association of engineers. Such measures are much more far-reaching than are efforts to protect the lawful use of the title of " engineer ", and raise a number of problems.

The activities and responsibilities of engineers are so varied that it is not easy to arrive at a generally satisfactory definition of professional engineering. For example, in December 1937, after discussions which had been going on since 1911, the following definition of professional engineering was approved by the American Society of Civil Engineers and other professional organisations in the United States :

> Professional service, such as consultation, investigation, planning design or responsible supervision of construction or operation, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works or projects, wherein the public welfare, or the safeguarding of life, health or property is concerned or involved, when such professional service requires the application of engineering principles and data.

It was proposed that any engineering activities, as defined in this formula, should, if they were connected with the planning or execution of public works, be permitted to be carried out only by registered engineers.[2] The definition was, however, criticised as being too broad.

The very fact that engineering is constantly widening its field makes it difficult to lay down precise formulæ concerning the professional prerequisites for the exercise of engineering activities. There is no generally accepted method of distinguishing between the five traditional branches of professional engineering, namely civil, mechanical, electrical, chemical, and mining and metallurgical engineering. It is even more difficult to decide where the various

[1] In New Zealand, local authorities may, with certain exceptions, employ only registered engineers for the construction or maintenance of works exceeding an outlay of £10,000 (Engineers' Registration Amendment Act, 1944, in force since 1 Apr. 1945).

[2] Under the Constitution of the United States, legislation on this matter is in the hands of the 48 States. Many of the States have legislation which provides that only registered engineers (who need not always be persons with academic degrees) may be employed by public authorities for the construction of roads, bridges, viaducts, etc.

subdivisions begin and end, and where engineering merges with, for example, chemistry or architecture, or with commerce. If provisions concerning the licensing of engineers do not take specialisation into account but limit themselves to bestowing a title of "professional engineer" or "registered engineer", the licence will not always be a guarantee that the individual engineer is fully qualified for the special tasks which he assumes; if, on the other hand, registration licenses an engineer only for a particular, narrowly defined field of engineering, the range of activities permitted to the individual engineer might be unduly limited.[1]

By whom should the certificate or licence be granted? Three alternatives are possible: they can be granted by associations or "chambers" of engineers; by special Governmental examination boards; or by technical schools, colleges and universities. These three alternatives are not absolutely exclusive, but allow various combinations; for example, if an association of engineers is given the right to grant (which means, also, to withhold and to withdraw) certificates, their prerogatives and principles, and the range of their autonomy will regularly be determined by the general legislature of the particular country; and if the possession of such certificates is to be a prerequisite for the lawful exercise of the profession, or for certain professional activities, some Government supervision of such associations, or at least the possibility of appealing from their decisions to an administrative or educational authority, will be considered necessary; on the other hand, Government examination boards will usually contain representatives of acknowledged associations of engineers, and/or representatives of institutions of higher learning. Another difficulty remains, however: in view of the number of engineers' associations existing in various countries[2], it will be difficult to determine to which of these associations the privilege of granting licences should be given and from which it should be withheld.

It is sometimes asserted that engineers should have their own "chambers", which would enjoy prerogatives and privileges similar to those enjoyed in certain countries by lawyers' or doctors' "chambers". However, in many countries lawyers and doctors are free to exercise their profession after having obtained a degree from an institution of higher education. Furthermore, lawyers' and doctors' activities and responsibilities are more easily defined than those of

[1] In the State of Kansas, engineers are registered for the special branch "in which the applicant is best qualified or which most nearly covers his present field of practice" (Registration Board for Professional Engineers, State of Kansas, *Fourteenth Annual Roster*, 1945, p. 10).

[2] In Great Britain, on the average nearly one new association, council institute, organisation or society representing some branch or branches of engineering or applied science was formed each year between 1848 and 1933. Cf. "Engineering societies: their multiplicity, their relations, their duplication", in the *Technological Review*, July 1933, p. 330.

engineers. Also, engineers, unlike doctors and lawyers, act comparatively seldom under personal responsibility; the great majority of them act under corporate responsibility, *i.e.*, under the responsibility of the firm or institution by which they are employed.[1]

Finally, tendencies toward licensing and registration might conceivably put an exaggerated premium on formal requirements. There exists at present a tendency to make higher responsibilities and higher incomes accessible to persons who, without having had the benefit of a specific type of formal education, prove their worth by their actual accomplishments. Thomas Edison did not possess an academic degree.[2]

The problems of the protection of titles and the registration and licensing of engineers lead to the wider question of what are and what should be the tasks of specialised professional bodies, composed exclusively of members of the profession, in determining the conditions for the exercise of the profession and control over its members. Generally speaking, the main difficulty consists in drawing the demarcation line between those matters which exclusively concern members of the profession and those which, though of great importance to the profession, also vitally affect the community as a whole. Unquestionably, there exist certain technical questions that are of interest only to the members of the profession concerned and can best be dealt with by it, but the questions which are of real importance will be of great concern also to the rest of the population. This holds true of the three main problems in which professional bodies or "chambers" are usually most interested, namely: *(a)* the standards of study and training for persons desirous of preparing for the profession; *(b)* the "accessibility" of the profession—the requirements (professional, personal, legal, etc.) which a person has to fulfil in order to become and to remain a recognised member of a profession; and *(c)* the determination of remuneration for the services of the members of the profession, including minimum rates.

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[1] In the engineering departments of most of the large manufacturing companies in the U.S.A. only a small percentage of the technical staff (e.g., approximately 10 per cent. of the technical staff in the laboratories of the Bell Telephone Company) are licensed engineers.

[2] An American authority on these questions wrote recently: "Are we to have an aristocracy in science and engineering on a basis of degrees rather than on accomplishment? . . . Are the graduates of night school courses inherently below those who take the day courses? Are not the differences between individuals in either type of training greater than the difference between the medians of the two types? Take the man and not the degree. . . Whereas degrees and scholastic achievements should be duly taken into consideration, they should not alone determine a man's chances of promotion, both in the importance and responsibility of his work and in the increase of income. My own classification . . . would damn no individual on the accident of the training he has been able to purchase but it would ruthlessly exclude him from the group if he had the wrong aptitudes or social attitude" (John MILLS, *op. cit.* pp. 109-111).

Employers, the Government, fellow-employees, clients, members of other professions, the different categories of consumers, are all interested in these questions. Hence, the delineation of the prerogatives, rights and duties of professional bodies is a task of considerable complexity, and of importance, not only from a national, but even from an international point of view. The manner in which these questions are answered depends largely on the conditions and traditions prevailing in the various countries ; unless the jurisdiction of professional bodies is carefully defined, there is a risk of favouritism and discrimination and the dangers of a " closed " profession with monopolistic tendencies.

Technical Education and Training

The Education of Engineers and Technicians.

In the extensive investigation of engineering education which was carried out in the United States between 1923 and 1929 by the Society for the Promotion of Engineering Education under the direction of Dr. W. E. Wickenden, it was stated that

> A complete programme for engineering education must include three characteristic techniques : one for the control of nature, one for the direction of man, and one for the appraisal of values. . . . A true professional discipline deals not only with science and technique, but also with the personal attitudes, the ethical considerations and the functional responsibilities in society which give the profession its distinctive hallmark.[1]

This statement is true today. As far as the education of engineers is concerned, the following trends appear particularly notable :

(1) It is often urged that engineers should receive a broader education in the social sciences than is usually the case, in order to enable them to play the role to which they are destined in the developments and reforms that lie ahead, and to exercise fully their leadership and initiative in the factory, in the community and in the nation.[2] It has also been advocated that prospective engineers should undergo obligatory apprentice training in manual work in the factories ; that they should devote a certain amount of time to community activities, work in social agencies, etc., and that the

[1] Society for the Promotion of Engineering Education : *Investigation on Engineering Education Report* (Pittsburg, 1930), p. 63.

[2] For example, at a symposium on professional activities of the American Society of Civil Engineers (*Civil Engineering*, Oct. 1936, p. 705) ; *Report of the Board of Investigation and Co-ordination* of the American Society for the Promotion of Engineering Education, 1934 ; Presidential Address of Sir Josiah Stamp before the British Association for the Advancement of Science, 1936 ; " Les Ingénieurs ", by André GARCET, *Esprit* (Paris), Jan. 1937, pp. 550 *et seq.* ; " Report of the Committee on Engineering Education after the War ", *Journal of Engineering Education*, Vol. 34, 1944 ; *Mechanical Engineering*, Vol. 66, 1944, pp. 403-412 ; " The Engineering Profession Tomorrow ", by R. E. DOHERTY, President of the Carnegie Institute of Technology, *ibid.*, pp. 602-604 ; " Comptes rendus du Congrès national de progrès social, Bruxelles, mai 1945 ", by M. DELSINNE ; *Le Progrès Social*, Dec. 1945 ; *Ingénieurs et Techniciens dans le Monde*, by A. ANTOINE, Paris, 1946, p. 65.

study programmes should be prolonged by one or two years in order to give the engineering students a broader cultural and social education.

(2) In some countries, it is demanded that specialisation of technical studies should not begin too early, in any case not before the second or third year of higher technical training. A broad technical education is needed not only to meet the growing complexities of technology, but also to make it easier for the individual engineer to change his special field of activity later if this should be made necessary, as is not infrequently the case, by technological, economic or political changes. Although the machine age is an age of specialisation, it is (and should increasingly become) an age not only of physical but of intellectual and professional mobility.

(3) A person's aptitudes—the mental factors which determine the degree of perfectibility of his performance—are mostly inherent in his personality and therefore not subject to change. Experience has shown that, not infrequently, young persons choose to enter the engineering profession without having a clear conception of the aptitudes needed. As a result, the knowledge these students are expected to accumulate does not correspond with their aptitudes, and they achieve less professional success and personal happiness than would otherwise be the case, and society as a whole does not profit from their particular qualifications as much as it could. An exhaustive investigation of engineering education in the U.S.A. revealed that of every 100 students admitted to engineering colleges in the late 1920's only 38 ever completed their studies, and only 28 did so within the specified period.[1]

Hence, organised efforts are being made in various countries to make available to young persons realistic information about the aptitudes required for the different fields, and about the characteristics of and requirements for the various careers.[2] In addition to vocational guidance, there is also an increasing emphasis on "individual counselling" of prospective students, and it has been proposed to keep a close watch on the proportion between the number of students entering upon a certain programme and of those actually completing their studies; to discourage at a comparatively early stage students not likely to succeed in a given field from continuing those studies; and to facilitate, even at a later stage, the switching from one field to another.

[1] Cf. *The Professional Engineer*, by E. L. BROWN (New York, 1936), p. 31; *Professional Aptitude Tests in Medicine, Law and Engineering*, by I. L. KANDEL (New York, 1940).

[2] The Recommendation concerning employment organisation in the transition from war to peace, adopted at the 26th Session of the International Labour Conference, states: "Vocational guidance service adapted to their needs should be available for all young persons, both prior to and at the time of leaving school, through the school or the employment service".

(4) In order to prevent the " misdirection " of manpower, efforts and money, and to secure the best utilisation of educational opportunities, secondary and higher technical schools find it useful, in co-operation with industry and the Government, to adapt the curricula and organisation of studies to changing needs. In turn, the public authorities, in co-operation with schools, scientific institutions, industry and workers' organisations, periodically survey employment trends and changes in professional requirements.

(5) Special arrangements are being made to enable demobilised soldiers and, in general, persons who had to interrupt their studies because of the war, to attend institutions of higher learning. A recommendation adopted at the 26th Session of the International Labour Conference declared :

> Men and women whose higher training and education has been prevented or interrupted by war service, whether in a military or civilian capacity, or by enemy action, or by resistance to the enemy or enemy-dominated authorities, should be enabled to enter upon or resume and complete their training and education, subject to continued proof of merit and promise, and should be paid allowances during their training and education.[1]

Efforts are being made to open the engineering profession to qualified persons irrespective of their financial capacities.[2] In particular, the entrance conditions of engineering colleges and similar institutions should not discriminate against persons *(a)* who, while talented, do not possess the means to sustain themselves during the period of their studies ; *(b)* whose preceding education deviates, without fault of their own, from the normal pattern ; and *(c)* who wish to start or to continue their higher education at a later age than the usual.

Training of Semi-Professional and Skilled Workers.

With respect to the opportunities which young workers should have to acquire greater knowledge, Mr. W. B. H. Lockerbie, J.P., M.I.Min.E., President of the North of England Branch of the Association of Mining Electrical and Mechanical Engineers, recently declared (speaking of the coal mining industry): "Every apprentice should have such training both in electrical and mechanical engineering that he should feel, to paraphrase Napoleon's dictum, 'that he had a chief engineer's baton in his tool-bag '." [3]

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[1] I.L.O. : *Official Bulletin*, 1 June 1944, p. 69.

[2] According to the Philadelphia Declaration one of the solemn obligations of the International Labour Organisation is " to further among the nations of the world programmes which will achieve the assurance of equality of educational and vocational opportunity ".

[3] " Proceedings of the Association of Mining Electrical and Mechanical Engineers " in *The Mining Electrical and Mechanical Engineer* (Manchester), Nov. 1945, pp. 158-159.

Under the impact of the war, the free countries greatly extended the educational and training programmes for workers. For example, in Canada the system of Federal subsidies established by the Vocational Training Act of 1942 encouraged all provinces to organise vocational courses and systems of apprenticeship under official supervision. In the U.S.S.R. from October 1940 onwards, a growing network of vocational schools has been developed which, between May 1941 and July 1944, granted diplomas to 1,880,000 young workers (this figure does not include workers who attended higher technical courses and universities).[1]

Particular attention has been paid to these matters in the liberated countries of Europe ; France, immediately after her liberation, entered upon an intensive programme of establishing vocational training centres (900 in 1944, 1,800 in 1945, and a proposed total of 2,500 in 1946)[2] with a view to substituting, to a large extent, systematic training for apprenticeship ; in Czechoslovakia, supplementary courses, compulsory for two years, are to be extended and linked up with the secondary schools, and special arrangements have been made for the vocational rehabilitation of the 400,000 or 500,000 young men and girls who had been mobilised to work in German factories.[3]

While increased emphasis is being laid on the training of apprentices and workers in technical and vocational schools, the advantages of " training on the job " have been realised. In this respect the war brought interesting innovations and, thanks largely to the co-operation of engineers and technicians, " training within the factory " has proved so successful [4] that it is being widely used in the post-war era.[5]

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[1] 27th Session of the International Labour Conference, *Report III* (Paris, 1945), pp. 47-48. The Vocational Training Recommendation adopted at the 1939 Session of the International Labour Conference laid down a general plan for the organisation of technical and vocational courses as well as for part-time supplementary courses which would give all workers, whether or not they received training before entering employment, an equal opportunity to extend their technical and trade knowledge according to their individual ability. Another Recommendation concerning apprenticeship, also adopted in 1939, deals exhaustively with the special problems of apprentices. The 1944 Recommendation concerning employment organisation in the transition from war to peace laid down principles for training and retraining programmes (I.L.O. *Official Bulletin*, 1 June 1946, pp. 68-69).

[2] Cf. " Economic and Social Policy in France " by C. BETTELHEIM, p. 156 *(International Labour Review*, Vol. LIV, Nos. 3-4, Sept.-Oct. 1946).

[3] 27th Session of the International Labour Conference, *Report III* (Paris, 1945), pp. 47-48.

[4] Cf. " Training within Industry in the United States " by C. R. DOOLEY, *International Labour Review*, Vol. LIV, Nos. 3-4, Sept.-Oct. 1946, pp. 160-178.

[5] Declaring that the " new training technique, known by the name of ' training within industry ' has demonstrated its unquestioned effectiveness ", the Third Conference (Mexico City, April 1946) of the American States Members of the International Labour Organisation adopted a resolution favouring the placing of the question of training within industry on the agenda of an early session of the International Labour Conference.

Exchange of Technical Knowledge and Personnel

More than ever it is being realised that international exchange of technical knowledge is a condition of technical progress and, indeed, a prerequisite for international peace. In the United Nations Educational, Scientific and Cultural Organization, the United Nations have created a potent instrument to foster and co-ordinate the collaboration of nations in this field. The members of the technical professions have always been among the most active supporters of international exchange of knowledge and experience.

Valuable experience has already been gained in the organisation of exchange of technical knowledge. For example, within the British Commonwealth and Empire, organisational efforts to co-ordinate science and its application began in 1878 with the formation of the Imperial Institute; in 1929, the Council of Imperial Agricultural Bureaux was formed; since 1942, the Dominions have had scientific representatives in London; and during the war, the British Commonwealth Scientific Office was created for the purpose of co-ordinating scientific efforts throughout the Commonwealth and Empire, and of interchanging scientific opinion with the United States. An Empire Scientific Conference (London, Cambridge and Oxford, June-July 1946) was called to discuss collaboration on scientific matters which are of direct interest to the Governments of the United Kingdom, the Dominions and India. Some countries, for example, Great Britain, the U.S.A., the U.S.S.R., Sweden and Switzerland, have set up official "cultural relations" programmes in order to foster the exchange of technical knowledge and technical personnel with other countries.[1] These programmes provide for the exchange of professors and experts; the training of foreign students and foreign practising engineers in universities, laboratories and factories; scholarships and fellowships in the sending and in the receiving countries; collaboration with technical and scientific organisations abroad; inviting foreigners to congresses; making available scientific publications, technical journals, films and microfilms; technical missions to be sent to foreign countries at the request of Governments; and similar measures.

The Recommendation concerning employment organisation in the transition from war to peace, adopted at the 1944 Session of the International Labour Conference, urged the Members of the Organisation to "co-operate, where necessary, in reconstituting

[1] For the United States, cf. I. L. KANDEL, *Intellectual Co-operation: National and International* (New York, 1944); U.S. DEPARTMENT OF STATE, *The Cultural Co-operation Programme*, 1938-1943 (Washington, D.C., 1944); "Training of Chinese Professional and Technical Workers in the United States", *International Labour Review*, Vol. LI, No. 1, Jan. 1945, pp. 94-96.

and expanding vocational training and retraining", and declared that such co-operation should take the form of training instructors from other countries, of loaning experienced vocational instructors and teachers to other countries, and of providing other countries with textbooks and other equipment.

The need for organised assistance is, of course, particularly urgent in countries which, during the war years, suffered the full impact of enemy occupation. Professor Jan Belehradek, Rector of the Charles University, Prague, gave the following picture of the situation in Czechoslovakia :

> On November 17, 1939, after student demonstrations incited by German agents, all . . . Czech universities and schools of university rank in the so-called Protectorate were closed by Hitler's decree. According to official statistics relating to the concentration camp of Mauthausen, in Austria, where most of the victims among Czech scientists were kept, about 10 out of every 100 ordinary Czech prisoners survived, while among the Czech intellectuals, only 6 out of 600 returned home.
>
> Six years of complete cessation of research activities, hermetical isolation from the outer world with no possibility of obtaining journals and books from abroad, considerable material damage caused to many laboratories by the occupants, and a complete dismantling and removal to Germany of much valuable apparatus from many other laboratories are too heavy a handicap for the rehabilitation of Czechoslovak science. . . . At the two sessions of the International Labour Conference held during the war (New York City, 1941, and Philadelphia, 1944) Resolutions were unanimously adopted expressing the strongest condemnation of the " unprecedented atrocities committed by the Axis, and urging international solidarity for the reconstruction of the countries afflicted by them".

Indications are that in the era which lies ahead new devices for the exchange of technical knowledge will be developed. For example, emphasis is being given to the advantages of regional co-operation. Resolutions adopted at the Third Conference (Mexico City, April 1946) of the American States Members of the International Labour Organisation demanded that systematic arrangements be made among the American Member States of the Organisation to ensure and promote regular interchange among Governments and employers' and workers' organisations of all information useful in developing and improving vocational training facilities ; that these States provide each other with machinery and other supplies needed for increasing the number and activities of vocational training schools and workshops ; that centres for the advanced training of selected instructors be created ; that apprentices and trainees be exchanged ; and that regular inter-American technical training courses for workers be organised.

In a brief outline it is impossible to deal fully with all aspects of the social and economic role played by the engineer and technician. But even this brief outline shows that the technical professions hold a central position in contemporary society, and that the problems which are to be solved with their active help and co-operation

are manifold and complex. There is a pessimistic school which decries the development of the machine, and holds it responsible for many ills. Sometimes it is even argued that technical progress should be " stopped for a time ". The technically-minded will instinctively revolt against such counsel of despair. They are convinced that technology can and must be used for constructive purposes, and that a fuller utilisation of the earth's resources will help to heal the wounds of the war and create conditions in which one of the main causes of war—poverty and need—will be increasingly abolished.

On the other hand, members of the technical professions, because they are so keenly aware of the urgent need for progress, are sometimes impatient when looking at the complexities with which the experts on economic, social and political problems have to deal. However, technical experts, who are justly proud of the years of experiment and testing which go into every one of their own major achievements, will realise that it is as difficult to harmonise divergent social and economic forces as it is to harmonise divergent natural forces. Mutual understanding between the scientists and the persons who, by profession or office, are shaping economic and social policies, an appreciation of their respective tasks and difficulties, and of the interplay of their respective ideas and actions, is of paramount importance for the achievement of the aims for which they all strive in good faith.

What we are witnessing today, and what is becoming more and more the aim of farsighted men in many spheres of activity, is the integration of society. These efforts at integration are by no means incompatible with the need for specialisation, but it is necessary to move away from the watertight departmentalisation of the various fields of knowledge and endeavour.

REPORTS AND ENQUIRIES

Economic Survey of the United Kingdom for 1947

On 21 February 1947 the British Government presented to Parliament in a White Paper, Economic Survey for 1947 [1], *an economic budget designed to balance the actual resources available in 1947 against both long-term and short-term needs. This Survey, summarised below, provides an interesting example of the planning of national resources to which countries faced with post-war reconstruction have had to resort, and to which reference is made on another page of this issue of the* Review. [2]

A summary of the comments made by the Federation of British Industries, the Association of British Chambers of Commerce, and the Trades Union Congress is also given. The Government has emphasised that the voluntary co-operation of all members of the community is necessary to attain the objectives set for 1947 in the White Paper, and the attitude of these organisations towards the proposals is therefore of considerable importance.

In a foreword to the Survey, the Prime Minister refers to the effect of the war on industry, the progress of post-war reconstruction, and the tasks which lie before the country in 1947. "The Government alone," he observes, "cannot achieve success. Everything will depend upon the willing co-operation and determined efforts of all sections of the population. It is essential that all should understand that the maintenance and raising of the standard of life of the people depends upon the extent to which every individual plays his or her part in contributing to the sum of goods and services available to the nation."

The Survey is divided into four sections dealing with economic planning, a review of the period July 1945-December 1946, the situation in 1947, and a statement of conclusions.

Economic Planning

The object of economic planning, the Survey points out, is to use the national resources in the best interests of the nation as a whole. The 20 million workers in the United Kingdom, using the

[1] Cmd. 7046 (London, H.M. Stationery Office, Feb. 1947).
[2] See above, "Post-War Manpower Problems in Europe", p. 485.

country's capital equipment and available raw materials, must satisfy five main national needs: defence, payment for imports, capital equipment and maintenance, personal consumption, and public services.

Having regard to the fact that in a democratic country the maximum possible freedom of choice must be preserved for the individual, and that the United Kingdom's economy is complex and diversified and depends upon imports for its continued existence, it is clear that economic planning in the United Kingdom should be as flexible as possible. Further, the effects of the war are such that planning can be on a short-term basis only for the present. Accordingly, the Government is seeking to develop a system of economic planning having the following main elements:

(1) An organisation with enough knowledge and reliable information to assess the national resources and to formulate the national needs.

(2) A set of economic budgets which relate these needs to the resources, and which enable the Government to say what is the best use for the resources in the national interest.

(3) A number of methods, the combined effect of which will enable the Government to influence the use of resources in the desired direction, without interfering with democratic freedoms.

Economic budgets [1] have been prepared for 1947 setting out resources and needs in terms of (i) manpower, and (ii) national income and expenditure. These statements are supplemented by analyses of the following particular problems:

(1) foreign exchange,

(2) investment (*i.e.*, capital equipment and maintenance);

(3) fuel and power, steel, timber and other scarce materials.

Since the needs exceed the resources, a balance must be struck by planning between conflicting needs, and in the allocation of resources necessary to meet these needs. The apparatus of Government control, direct or indirect, is used to guide the economy in the direction indicated by the plan, which, however, can be successful only if management and labour and the community generally accept its objectives and work together to achieve the desired ends. Equally important is the need for stable, or, if possible, lower costs and prices. The Survey points out, therefore, that while the Govern-

[1] "These economic 'budgets'", the Survey points out, "are entirely different in character from the Chancellor of the Exchequer's yearly Budget. They deal with man-years of work and quantities of goods; these may be totalled in terms of money, for that is the only way to add up the host of things which constitute the national production and consumption, but the money figures are really a shorthand for expressing production. The economic budgets must balance themselves ultimately, for it is impossible to consume more than is produced; the real question is how the balance is brought about. The Chancellor's Budget, on the other hand, deals solely with money; it is his estimate of the Government revenue and expenditure, and forecasts a net surplus or deficit on the transactions of the central Government. The economic 'budgets' have a considerable bearing upon the Chancellor's Budget, but the two forms of national account are entirely different and should not be confused."

ment adheres to its long-term objective of raising the standard of living of the people, any further general increases in wages and profits must be accompanied by a corresponding increase in production.

Review of the Period July 1945 to December 1946

At the end of the war, 42 per cent. of the nation's manpower were in the Armed Forces or were directly engaged in supplying them. Only 2 per cent. were producing exports and less than 8 per cent. were providing and maintaining the nation's capital equipment. The main task during this period was to demobilise the war structure and to set the civilian economy moving. This was done with very little dislocation, so that although the total employed population at the end of 1946 was 2 million less than in June 1945, because many women had left industry, and because many men and women were still on release leave and there were more unemployed, the total was still over one million greater than in June 1939, mainly because of the big fall in unemployment. The distribution of the available manpower for selected months is set out in the table below :

DISTRIBUTION OF TOTAL MANPOWER IN GREAT BRITAIN

	June 1939	June 1945	June 1946	Dec. 1946
	Thousands			
Coal industry	773	738	736	730
Public utilities	242	196	240	258
Transport	1,233	1,252	1,368	1,373
Agriculture and fishing	950	1,041	1,078	1,081
Building and civil engineering	1,310	722	1,184	1,250
Building materials and equipment	645	446	575	628
Metals and engineering	2,278	3,345	2,715	2,811
Textiles and clothing	1,803	1,150	1,330	1,405
Food, drink and tobacco	654	518	566	597
Chemicals	266	423	315	324
Other manufacturing industries	1,269	999	1,155	1,265
Distribution	2,887	1,958	2,170	2,304
Other consumers' services	2,225	1,598	1,884	1,966
Public service	1,465	2,030	2,099	2,130
Total in civil employment	18,000	16,416	17,415	18,122
Armed forces and auxiliary services	480	5,090	2,032	1,427
Total in employment	18,480	21,506	19,447	19,549
Demobilised men and women not yet in employment	—	40	700	300
Insured unemployed	1,270	103	376	398
Total working population.	19,750	21,649	20,523	20,247

The changes in the distribution of manpower resulted in a substantial expansion of national production in 1946, but the greatly increased need for exports consequent upon the loss of gold and foreign investments, and the incurring of war debts, caused a worsening of the country's capital position in relation to the rest of the world by nearly £6,000 millions. This resulted in local consumption being considerably lower than it otherwise would have been. Further, world shortages of food and raw materials restricted imports. There was a deficit of £450 millions in the balance of payments.

Equally important with the need for increased exports, was the restoration and extension of the nation's capital equipment which had worked at great pressure throughout the war, with very little maintenance. An increase in the labour available for this purpose enabled the construction of new housing and industrial plant and buildings but was not sufficient to make up arrears from six years' deferred maintenance.

The main results achieved during the period are as follows:

(1) The defence sector (armed forces and munitions) has been cut to a little over one-fifth of its size at the end of the war.

(2) Exports have expanded to 110-115 per cent. of the 1938 volume, an amount still insufficient to pay for imports at 70-75 per cent. of 1938 volume.

(3) A normal pre-war year's work of output of industrial equipment and maintenance has been done in 1946.

(4) Homes have been provided, by new building and repair, for nearly 300,000 families, and the way has been cleared for as fast an expansion in house-building as the material supplies will permit.

(5) There has been little change, on balance, in food consumption, but there was a considerable expansion in supplies of manufactured goods to the home civilian market, to levels ranging from two-thirds to over 100 per cent. of pre-war.

In addition, war savings, full employment, the introduction of minimum standards of living supported by subsidies, higher rates of national insurance benefits and old-age pensions, family allowances, and redistribution of income through taxation have all contributed to a substantial increase in effective purchasing power which has resulted in the available supplies being unable to meet the demand. It is emphasised, however, that for a large section of the people, the present food and clothing rations are more than they could normally afford even in good pre-war years, and are much more than they could afford in years of depression.

The Situation in 1947

The central fact of 1947 is that there are not enough resources to do all that needs to be done. There is barely enough to do all that must be done. To meet all needs production would have to be increased by at least 25 per cent. This is clearly impossible in 1947 because means must be found to pay for imports formerly obtained out of returns on foreign investments. Further, six years' arrears of industrial equipment must be made up. As a result the Govern-

ment has decided that first importance must be attached to payment for imports, and to basic industries, particularly coal and power.

The 1947 import programme provides for an expansion to 80-85 per cent. of the 1938 volume. Much more than that would be needed to increase rations considerably, but imports are limited by world shortages of food and raw materials, and by foreign exchange. The import programme set out below is not immutable but is continually changing with supply conditions and prices. The substantial increase over 1946, however, reflects both increased quantities and increased prices.

The 1947 import programme is as follows:

	£ millions (f.o.b.)
Food and supplies for agriculture	725
Raw materials and supplies for industry	525
Machinery and equipment (including ships)	60
Petroleum products	55
Tobacco	50
Consumer goods	35
Total	1,450

In addition to the foregoing expenditure on imports, it is estimated that net overseas Government expenditure will amount to £175 millions. Thus, a total of £1,625 millions of foreign exchange will be required in 1947. To meet this, £350 millions of the United States and Canadian credits are to be used and £75 millions, it is anticipated, will be obtained from invisible income. Since the Government has to conserve its dollar reserves to be able to meet, from July of this year, the convertibility obligations under the Anglo-American Financial Agreement, the remaining £1,200 millions will have to be provided from exports and re-exports.

Four conclusions follow for 1947:

(i) the export target of 140 per cent. of 1938 volume by the end of the year as against the 1946 level of 110-115 per cent. of 1938 volume, is of prime importance;

(ii) exports to the Western Hemisphere (and to some European countries with which there are deficits, *e.g.* Sweden, Switzerland and Portugal) are of particular importance;

(iii) close import control must be maintained, particularly of products which come predominantly from the Western Hemisphere;

(iv) home production must be increased along lines which contribute to these policies.

As it is clear that a further expansion both of imports and exports will be needed, the long-term target for exports still stands at 175 per cent. of 1938 volume.

The second vital need is the necessity to restore the full efficiency and productive power of the basic industries and services. In order to do this at present output per man-year, a larger labour force

is necessary. Moreover its present distribution, by industries and by place, is not satisfactory. The cost to the nation in 1947 of this unbalanced distribution is equivalent to the loss of the labour of 120,000 men throughout the year.

The labour force in civil employment at the end of 1946 was 18,122,000. By a reduction in unemployment to 2½ per cent. of the insured population, it is hoped to increase this to 18,300,000 men and women by December 1947. But this prospective force falls substantially short of what is needed to reach the national objectives. Accordingly the Government plans to recruit at least an additional 100,000 workers by encouraging women to return to industry and elderly people to postpone their retirement, and from foreign countries. The Government also seeks to increase the effectiveness of the labour force by encouraging increased output per man-year, and by influencing its distribution by all methods short of Government direction. The probable size and distribution of the labour force are set out in a table above. [1]

The main considerations underlying this distribution are:

(i) Special importance and difficulty attach to coal mining, agriculture, public utilities; the high rate of loss of men from the mines makes even a small increase of the existing manpower an extremely difficult target.

(ii) It is desirable that further immediate expansion of the building labour force should be limited because of shortage of timber and other materials; special efforts will be needed to meet the target for building materials.

(iii) It is desirable that further expansion of the engineering and other metal-using industries should be limited, not only because the workers are needed elsewhere, but also because shortage of steel and certain non-ferrous metals will in any case limit additional useful employment in these industries.

(iv) Employment in textiles and clothing is still 400,000 below pre-war. The proposed increase is as much as can be expected in one year.

(v) It is desirable that the expansion of the labour force engaged in transport, distribution and consumers' services should as far as possible be limited.

(vi) A reduction is assumed in the numbers employed in national and local government; a thorough review is now taking place.

With this distribution of manpower, and taking into account the probable availability of resources, the Government has sought to frame a balanced series of objectives for 1947 as follows:

Defence.

The Armed Forces are to be reduced from the December 1946 level of 1,427,000 to 1,087,000 by March 1948. This will also result in a fall in the number of workers supplying them.

Payments for Imports.

Exports must be raised to 140 per cent. of 1938 volume by the end of 1947.

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[1] P. 489, in the article "Post-War Manpower Problems in Europe".

Capital Equipment and Maintenance.

A housing programme of 240,000 new permanent houses and 60,000 temporary houses is contemplated. The amount of capital equipment and maintenance work (other than work on houses) is to exceed that of a normal pre-war year by at least 15 per cent. [1]

Consumption.

Food supplies will not increase much in 1947 because of world shortages. A steady effort is to be made to increase supplies of the most important manufactured consumer goods such as clothing and household textiles, pottery and furniture which, however, are likely to continue to be in short supply.

Public Services.

Programmes for education, public health and national insurance are to go forward, and a proper degree of efficiency of the public services is to be maintained, with special attention to economy in manpower.

Conclusion

The achievement of all these objectives depends upon the basic industries and services, and, in particular, coal, power, steel and transport. The central problem is coal and power, especially the attainment of a production of 200 million tons of coal, which is an indispensable minimum.

The second problem is to expand the nation's labour force, to increase its output per man-year and, above all, to effect its best distribution.

The third problem is the payment of imports required, a necessary condition for which is the expansion of the volume of exports to 140 per cent. of 1938 volume by the end of the year.

The Government, the Survey concludes, can set the tasks, but in the final analysis it is upon the voluntary efforts of all members of the community that success depends in a democratic country.

Comments by Industrial Organisations

Federation of British Industries

The views of the Federation of British Industries on the White Paper are contained in its recent publication *Interim Statement on the Economic Outlook* [2] which states that the *Economic Survey for 1947* is helpful in so far as it discloses the facts, but that it has failed to produce in the country a sense of urgency. First things are placed first only when they are politically acceptable. As a result, the proposals do not go far enough to restore a state of balance between resources and economic objectives.

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[1] The subject of capital formation is further discussed in the White Paper on the *National Income and Expenditure of the United Kingdom 1938 to 1946* (Cmd. 7099) published in April 1947.

[2] London, Federation of British Industries, 1947.

Further, it is stated that the collective performance of all branches of industry depends upon the outlook, judgment, resources and resourcefulness of countless individual directors and managers, as well as upon the response of the staffs and workpeople. The national plan must, therefore, carry the confidence of all concerned, for in spite of controls that limit their freedom, the actual course they will pursue depends upon their individual confidence, judgment and initiative.

Part of the United Kingdom's difficulties, the Federation considers, arises from the undertaking by the Government of financial commitments far in excess of the physical resources available to meet them. As a result, it has been necessary to institute a complex system of controls, including rationing, utility production, price control, cost-of-living subsidies and foreign exchange control. Since it is impossible to ration and control everything, steadily mounting inflationary pressure made itself felt in the electric supply industry, and in the progressively increasing demands for the services of the gambling industries, and for railway travel and entertainment. Inflation affected production, as well, so that at the end of eighteen months of reconversion, British industry has reached a point at which it must either reorganise or come to a standstill.

Besides the general criticism outlined above, the Federation of British Industries has made several detailed proposals, the main points of which are summarised below.

Bridging the Gap between Economic Objectives and Resources.

The Government should ensure that activities which are adjudged essential as short-term objectives shall be fully—and continuously—supplied with their needs in fuel and materials, while other activities or projects, whether productive or non-productive, are cut back.

Coal.

The target for coal should be increased to 220 million tons. The National Coal Board should be urged immediately to take all possible steps to improve coal-washing facilities, and otherwise to improve the quality of coal delivered.

Efforts should be made to import 10 million tons of coal, without reducing the quantities being shipped for the relief of Europe.

The export of coal-cutting and other mining machinery needed for home use should be critically re-examined.

The coal distribution plan already announced should be so operated that the extra amounts to be allocated, whether handled regionally or otherwise, are guaranteed amounts, and that the principle is observed that production considered to be most vital shall receive 100 per cent. of its needs.

Power Supply.

Resources for building power stations and manufacturing their equipment should be mobilised, their necessary supplies guaranteed, and a programme set up based upon a two-year construction interval.

To meet the emergency, new designs for power station equipment should be deferred, and replicas of existing stations reproduced to save time.

The export of power station equipment needed for home use should be critically re-examined.

The importation of power station equipment from Germany should be examined. This form of emergency assistance should not be rejected merely because special power stations may be needed to accommodate the equipment : they should be constructed, and, if necessary, German specialist labour brought over to erect the plant. All other possibilities of importation should be exhaustively surveyed.

The arrangements for any necessary load shedding should be organised so that industrial undertakings may know the particular days on which their own turn for shedding may come.

Materials.

A balance must be struck between supply and demand for steel : after increasing supply to the maximum possible, the method of securing this balance should be by reducing the amounts allocated to less essential parts of the programme. If the export and capital equipment targets cannot be reached in any other way, it may even be necessary to reduce the housing programme still further than is suggested in the White Paper.

Unremitting efforts should be made to increase the supply of critical materials. There is grave risk of expansion of supply taking second place to the solving of distribution problems.

Inland Transport.

The building and repair of locomotives and wagons for the home railways and the renovation of the permanent way should be among the objectives to be maintained at maximum activity. Plans should be prepared and carried out for the relief of these and any other main bottlenecks in the railway system, which are repeatedly the cause of embargoes and delays.

Increase of Productivity.

Incentive should be increased to all grades by a reduction in direct taxation.

Consultation with industry should be maintained to keep a constant watch upon the export of capital plant. The conflict between the capital equipment and export targets should be resolved. In certain cases, notably rail transport, re-equipment at home should be given priority over export.

The Government should collaborate with industry to ensure that the production of capital plant for the industries adjudged to be of greatest importance should take precedence over that for other industries, which may in any case not be able to operate at full activity.

Export.

There should be regular and continuing consultation with different industries in order to maintain a constant watch on their ability to continue selling fully manufactured goods, with an adjustment of policy when this may be found necessary.

Taxation and Monetary Policy.

A discriminating use should be made of indirect taxation to counterbalance the inflationary effects of reducing direct taxation.

The present policy of progressively reducing the rate of interest paid by the Government on savings should be brought to an end. In the case of small savings it should be reversed to encourage a greater willingness to save and so accelerate the absorption of surplus purchasing power.

Controls.

No opportunity should be lost of getting rid of any one of the controls; the price mechanism which is the alternative should be allowed to act at the first possible moment.

Government Administration.

The Government is urged to allow senior civil servants to concentrate on their immediate task of administration and not to add to their cares the exacting work of preparing intricate schemes of controversial legislation, for the country could survive a failure to introduce new legislation but could not survive a break-down of the administrative machine.

Finally, the statement adds that the Federation accepts the necessity for the national economy to conform to an over-all plan and has indeed suggested additional planning to meet the emergency, but emphasises that the idea that a central plan can be enforced by a host of detailed controls must be replaced by a technique which diffuses throughout industry the responsibility for carrying out the plan.

Association of British Chambers of Commerce

The views of the Association of British Chambers of Commerce are set out in a memorandum of 14 April 1947 prepared for submission to Cabinet Ministers and for general publication.

The Association believes that the present serious position can only be rectified provided that certain basic conditions are given the fundamental position they demand. It is firstly of the utmost importance that the nation should not be asked to do more than is within its capacity. In the second place, it would seem essential that steps be taken to avoid further deterioration of the country's economic position caused by the inflationary pressure which is a result of the present national policy. Thirdly, it is pointed out that the success of planning depends upon the wholehearted co-operation of employers, managers and workers alike.

The Association states that it is most anxious to be of assistance to the Government. Its views as to what should be the two years' emergency policy of the Government are set out below.

(1) The consideration of nationalisation schemes not yet enacted should be deferred until more normal times are regained.

(2) Immediate steps should be taken to assist in increasing coal and steel production, electric power station capacity, railway engines and wagons (and transport facilities generally) and farming equipment. The whole question of the export of capital goods should be re-examined in the light of the requirements of the home market.

(3) Where the immediate needs of production can thereby be more efficiently met, encouragement should be given to an expanded importation of machine tool equipment, so long as this is unobtainable from home sources.

(4) The coal target should be raised to at least 220,000,000 tons and endeavours made to purchase 10 to 15 million tons of coal from overseas for delivery over the next six months.

(5) Unremitting attention should be given to obtaining the maximum home food production and in providing assistance to the farming industry in such urgent matters as labour, machinery, and rural housing. Young agricultural workers should be exempted from National Service for the next two years at least.

(6) Immediate attention should be given to abolishing controls and licences no longer essential, and to reducing the swollen staffs of certain Government Departments. As soon as possible some Ministries should be abolished and others combined. The Ministries that might be closed down as soon as is practicable are the Ministry of Supply and, later, the Ministry of Food. Further economies could be effected by combining the Ministry of National Insurance with Pensions, and the Ministry of Health with Town and Country Planning.

(7) The output from industries working a five-day week, and production costs, should be carefully watched. Diminished output and higher costs cannot be afforded.

(8) The policy governing wage rates should be reviewed by trade unions and employers under the over-all guidance of the Government with a view to assuring a basic wage but leaving ample rewards for increased output on the one hand and sanctions for bad work and idleness on the other.

(9) Non-essential imports should be restricted or eliminated.

(10) The policy of bulk buying should be re-examined forthwith and wherever possible terminated, leaving purchasing to expert organisations and individuals with years of practical experience in world commodity markets. This would materially assist the re-establishment of the entrepôt trade.

(11) Taxation should be drastically revised. Direct taxation should be lowered and indirect increased. Overtime earnings of workers should attract reduced rates of taxation.

(12) Small savings should be stimulated by some increase of tax-free interest receivable.

(13) A commencement should be made in reducing the alarmingly high and increasing cost of food subsidies.

(14) Finally, the Government should indicate broadly but definitely the direction industry should take in meeting both home demands and overseas needs and the priority countries to which exports should be expanded, regard being had to currency needs. Industry should then be left responsible for producing the goods, and be given Government priority assistance in obtaining materials in short supply.

Trades Union Congress

The views of the Trades Union Congress are given in a statement by its General Council issued on 27 March 1947. In view of the Government's intention to arrange discussions with both sides of industry on the questions dealt with in the White Paper the statement discusses the White Paper in general terms only.

The statement points out that the present position arises from deficiencies in the economic and productive system which are, in large measure, due to the war. Modernisation and the normal maintenance of industry were deferred. Moreover, the balance between the different industries was disturbed by the sweeping industrial readjustment and the changes in the foreign trade position resulting from the effects of the war on the economy.

The White Paper targets for 1947, it is stated, appear low if considered only from the point of view of the obvious need of the country, but it was necessary to frame targets which could be achieved during the period. The great need is to re-establish a stable balance between all the essential industries so as to avoid any further disruption. Emergency measures should be initiated to effect an increase in the capacity of certain basic industries, particularly coal, electric power and rail transport. Thus the General Council considers that the target for the coal industry should be increased to 220 million tons in 1947. At the same time the engineering industry should be mobilised to allow the extension of the industrial capacity of the steel industry, and thus the railway and electrical supply industries, since an increased output of coal would be useless unless it could be transported and converted to power.

The General Council notes the continual emphasis throughout the White Paper on increasing output per man-year and states that it welcomes the intention of the Government to invite representative organisations of industries to co-operate with it in an attempt to establish the facts about output and productivity. It is critical however of the principle laid down in the White Paper that the nation cannot afford shorter hours of work unless these can be shown to increase output per man-year. The General Council maintains that not only does this statement set an impossible standard by which claims for a shorter week can be judged but that it would be unfair to expect those working in industries having a 48-hour week to abandon their claim to an improvement which is already well advanced.

In conclusion, the General Council states that it is ready to consult with the Government on the economic problems facing the country, and appeals to all sections of the community to contribute their full part to the solution of the present economic difficulties.

Employment of Women in France

In the vigorous campaign of reconstruction now going on in France, official statements and the reports of technical committees indicate that an important part in production is to be played by women workers. The following article reviews the present distribution and volume of female labour in employment in France, the position regarding women's wages, and official proposals to encourage recruitment among women.

Volume and Distribution of Female Labour

According to information obtained in an enquiry on economic activity made by the Central Statistical Service of the Ministry of

Labour, the distribution of female labour between the main occupational groups was estimated as follows on 1 July 1946 [1]:

TABLE I: WOMEN WORKERS BY GROUPS OF OCCUPATIONS, 1 JULY 1946

	Employers, managerial and salaried staff	Manual workers	Women working alone	Total
	Thousands			
Agriculture, forests, fishing	2,150	400	250	2,800
Mines, quarries	1	8	—	9
Manufacturing industry	375	928	367	1,670
Transport and related processes	64	11	45	120
Commerce, banking	720	88	329	1,137
Professional workers	170	160	55	385
Personal services	25	15	4	44
Domestic workers	—	640	—	640
Public admin. services	570	30	—	600
Public industrial services	5	20	—	25
Total	4,080	2,300	1,050	7,430

The manufacturing industries employing the largest numbers of women are indicated below. [2]

TABLE II: WOMEN WORKERS IN CERTAIN MANUFACTURING INDUSTRIES, 1 JULY 1946

Industry	Employers, managerial and salaried staff	Manual workers	Women working alone	Total
	Thousands			
Clothing	110	184	340	634
Textiles	30	247	18	295
Non-precious metals	55	165	—	220
Food	80	85	—	165
Hides and leather	12	50	7	69
Chemical industries	20	45	—	65
Wood industries	20	45	—	65

The figures published by the Central Statistical Service make possible also comparison between the volume of male and female

[1] *Revue française du Travail*, Nov. 1946, p. 711.
[2] *Ibid.*

labour. Table III below gives figures for the principal occupational groups, and the total numbers of male and female workers respectively occupied in each of these groups in March 1936. [1]

TABLE III: MALE AND FEMALE WORKERS BY GROUPS OF OCCUPATIONS, 1 JULY 1946 AND 1 MARCH 1936

Industry	1 July 1946								1 March 1936	
	Employers, managerial and salaried staff		Manual workers		Persons working alone		Total		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	Thousands									
Agriculture, forests, fishing.	2,170	2,150	1,000	400	430	250	3,600	2,800	4,283	2,921
Mines, quarries .	29	1	230	8	2	—	261	9	334	6
Manufacturing industry . . .	870	375	2,392	928	508	367	3,770	1,670	4,139	1,781
Transport and related processes.	406	64	364	11	110	45	880	120	904	132
Commerce, banking . . .	975	720	264	88	404	329	1,643	1,137	1,559	1,142
Professional workers. . . .	135	170	130	160	100	55	365	385	362	369
Personal services.	40	25	50	15	26	4	116	44	83	49
Domestic workers	—	—	70	640	30	—	100	640	96	663
Army	550	—	—	—	—	—	550	—	508	—
Public admin. services. . . .	600	570	280	30	—	—	880	600	572	238
Public industrial services. . . .	15	5	90	20	—	—	105	25	98	17
Total . . .	5,790	4,080	4,870	2,300	1,610	1,050	12,270	7,430	12,938	7,318

A comparison of the figures for March 1936 [2] and July 1946 shows that as regards distribution, volume and relative importance of female labour, the situation was on the whole similar in July 1946

[1] Only the totals columns are comparable as between the two dates.
[2] *Revue française du Travail, loc. cit.*

to that of March 1936. This is not true, however, of employment in public administrative services, where the number of women workers increased from 238,000 in March 1936 to 600,000 on 1 July 1946. In the processing industries, the volume of both male and female labour was smaller on 1 July 1946 than in March 1936, the number of women having fallen from 1,781,000 to 1,670,000, and the number of men from 4,139,000 to 3,770,000. As regards the non-precious metals industry, however, the level of employment in July 1946 was already higher for both men and women than in March 1936. This industry employed 132,000 women and 1,120,000 men (1,252,000 persons in all) in March 1936, as against 220,000 women and 1,255,000 men (1,475,000 persons in all) on 1 July 1946.

The enquiry conducted in July 1946 also gives information concerning the number of female workers under 18 years of age. Girl wage-earners under 18 made up 3.5 per cent. of all labour occupied in manufacturing industry as a whole, while girl apprentices in the same age group accounted for 0.7 per cent. As regards male workers under 18, the corresponding proportions were 4 per cent. for wage-earners and 1.3 per cent. for apprentices.

The number of girls employed in all gainful activity was thus slightly inferior to that of boys (144,900 as against 186,800). More girls than boys were employed in some occupations—industries involving simple operations which require a large volume of unskilled labour (such as paper, cardboard and food) and occupations in which mainly salaried personnel are employed (such as commerce and banking). In the industries in which the largest number of girls are employed (textile, clothing and related industries, and precious metals), the proportion of girl wage-earners to total personnel was also greater than that of boys.

Apprentices represented between 19 and 20 per cent. of girl workers, whereas the corresponding proportion in respect of boys was between 31 and 32 per cent. The largest numbers of girl apprentices were in the clothing, textile and wood industries and in sundry commercial occupations.

Wages

Equal Pay for Equal Work.

Considerable progress has been made in France since the liberation towards abolishing the idea of special wage rates for women, and in the realisation of the principle of equal pay for equal work.

Before 1939, only some of the collective agreements which had been made compulsory under the legislation of 1936 contained provisions to this effect. During the German occupation the progress achieved was to a large extent wiped out by the influence of German legislation, in which women's wages were theoretically fixed at 75 per cent. of men's wages for similar work ; this rule was applied in the industries controlled by the Germans, and the Vichy Government introduced similar provisions into the French legislation applying in the unoccupied zone.

Immediately after the liberation the provisional Government, in its measures regarding the provisional raising of the wage level, laid down the general principle that when working conditions and output were equal, the minimum wage rates for women workers

should be equal to those applying to men. Where such equality did not exist, a downward differential might be applied to women's wages but could not exceed 10 per cent. [1]

A further step towards the establishment of wage equality was taken in July 1946. A ministerial Order issued on 30 July, in conformity with the opinion of the National Commission on Wages, provided that those parts of the wage reorganisation Orders concerning authorised downward differentials for women's wages were rescinded as from 1 July. This Order was liable to involve reconsideration of the classifications established by the previous wage orders; it therefore laid down that the mixed committees, acting by industry or occupation, might submit to the Minister of Labour and Social Security, within two months of the publication of the order, proposals for modifying the decisions regarding job classification issued in application of the wage reorganisation Orders, if such decisions had set up classifications based on the existence of female labour. [2] A communiqué issued by the Minister shortly afterwards [3] stated that the abolition of the 10 per cent. differential was to apply immediately, with effect from 1 July 1946, in cases where the work was done by men or women without distinction, under the same conditions in respect of output and quality. Two other types of work remained to be considered: *(a)* work specially suited to women; and *(b)* work coming under neither of the above headings. As regards *(a)*, the differentials previously in force were permitted to continue; as regards *(b)*, the communiqué stated that no decision would be taken until the National Mixed Committees had met to examine the job classifications; these committees were to meet in September 1946.

In view of the conclusions of the mixed committees, the Minister of Labour decided in October 1946 [4] that the abolition of differentials for women's wages should apply without revision of the job classifications resulting from decisions in force, save in the case of agreements reached in application of the Order of 30 July 1946 and duly approved.

Comparison of Men's and Women's Wages in 1946.

Thus, in the wage schemes issued since the liberation, an attempt had been made to establish the principle of equality between the sexes regarding remuneration for equal output produced in the same conditions; and in no case were the wages paid to female personnel to be more than 10 per cent. below those of male personnel classified in the same category and grade. Two of the quarterly enquiries carried out by the Central Statistical Service of the Ministry of Labour give information concerning the differences between remuneration of men and women (both wage and salary earners) in the middle of 1946, that is to say just before the enforcement of the Order of 30 July referred to above, which marks a new step towards the establishment of wage equality.

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[1] Cf. *International Labour Review*, Vol. LI, No. 5, May 1945, pp. 598-612; "Wage Increases in Liberated France".

[2] *Journal officiel*, 3 Aug. 1946, p. 6897.

[3] *Circular TR 93/46* of 6 Sept. 1946.

[4] Decision of 31 Oct. 1946 (*Journal officiel*, 2-3 Nov. 1946).

Wage earners. On an average, the differentials applied to women wage-earners on 1 April 1946 amounted to about 15 per cent. Wages had, on the whole, increased; but the gap between men's and women's remuneration had been maintained, though variations may be noted in certain industries and occupational groups. As an instance, the following table shows the percentage differentials for one wage zone (the fourth) [1]:

TABLE IV. REDUCTIONS APPLIED TO WOMEN'S WAGES, AS COMPARED WITH MEN'S, APRIL 1946 [1]

Industry	Unskilled	Semi-skilled	Skilled
	Per cent.		
Food	15	15	18
Chemical industries	14	10	10
Rubber	16	15	15
Books	18	20	24
Textiles	13	13	18
Clothing	17	16	15
Wood	13	15	12
Metallurgical industry	14	14	11
Metal trades	13	15	13
Average	14	15	16

[1] Figures apply to wage zone No. 4.

It appears that the occupations which had recovered more rapidly, such as metals, wood and chemicals, were applying smaller differentials than those which had not yet got over the depression (the book, textile, clothing, and food industries). Nevertheless, in July 1946, taking all occupations together, the differential applied to women wage-earners was about 14 per cent. The gap between the wages of the two sexes had been reduced in some industries, particularly food, chemicals and rubber, but it had widened in the book, textile, clothing and metallurgical industries and in the metal trades. [2] These two enquiries show also that in all occupational groups the differential was smaller for unskilled labour than for the other groups of personnel.

If women's wages are compared with the minimum wage rates prescribed for men, it is found that in April 1946 women's wages hardly reached this minimum level; in such industries as food, clothing and wood, female personnel were being paid wages averaging less than the minimum rates for men. The situation had already improved considerably by July 1946, when women's wages were

[1] *Revue française du Travail*, Aug.-Sept. 1946, p. 507.
[2] *Idem*, Nov. 1946, p. 735.

from 1 to 12 per cent.—according to industry—above the minimum rates fixed for men (as against from 1 to 7 per cent. in April); the only industries in which women's wages were still below the men's minimum in July 1946 were the food and wood industries.

Salaried employees. On the whole, there was among salaried employees in April 1946 a gap of 13 to 14 per cent. between men's and women's remuneration, the differentials being similar to those for women wage-earners. [1]

Policy regarding Women's Employment

As already stated, female labour has recovered very much the position it held in 1936, and now accounts for 37.7 per cent. of the total working force. Nevertheless the women of the country are expected to provide a still larger contingent of workers for national reconstruction.

The Manpower Commission, whose conclusions have been adopted by the Government and the Legislature, recalls in its first report that the unoccupied population includes nearly a million unmarried women and over a million married, widowed or divorced women without children, and that a large number of women with children have had to leave their employment owing to the difficulties of the times; it is among these groups, and particularly among the childless women, the report continues, that a recruiting drive should be made; and they should be given the possibility of mounting the occupational ladder on the same terms as men. [2]

The Commission recommends a series of measures to encourage women to go to work, particularly: effective equalisation of men's and women's wages; greater facilities for women to acquire and improve occupational skills; access to all posts, including the highest; replacement of the single wage allowance by an equivalent family allowance, in addition to normal family allowance; supply facilities (co-operatives, etc.) for women workers; extension of social services, and particularly the obligation to establish nurseries near the homes of the women workers concerned; the needs and possibilities should be studied at the local level and the necessary funds made available immediately. [3]

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[1] *Revue française du Travail*, Aug.-Sept. 1946, p. 514.

[2] Commissariat général du plan de modernisation et d'équipement: *Premier Rapport de la Commission de la Main-d'œuvre*, Oct. 1946, p. 25.

[3] *Ibid.*, pp. 28-29.

INDUSTRIAL COMMITTEES

Second Session of the I.L.O. Inland Transport Committee

The Inland Transport Committee of the International Labour Organisation met for its second session in the International Labour Office in Geneva from 7 to 16 May 1947, the first session having been held in London in December 1945.

Mr. Henry Hauck, Director in the French Ministry of Labour and Labour Attaché at the French Embassy in London, presided at the second Session. Mr. Hauck, who had been selected as chairman by the Governing Body of the I.L.O., had also presided at the meeting in London.

The session was opened by Sir Guildhaume Myrddin-Evans, Chairman of the Governing Body of the I.L.O. Mr. E. J. Phelan, Director-General of the I.L.O., was also present at the opening sitting.

The following members attended the session on behalf of the Governing Body — Mr. Hauck for the Government group; Mr. Erulkar (India), with Mr. Lecocq (Belgium) as substitute, for the employers' group; and Mr. Finet (Belgium) for the workers' group.

Two vice-chairmen were elected by the Committee, namely Mr. G. W. Quick-Smith, Secretary, National Road Transport Federation, London, for the employers; and Mr. H. W. Fraser, vice-chairman, Railway Labour Executives Association, United States, for the workers.

The chairmen elected by the groups were Mr. J. Ricard (Denmark) for the Government group; Mr. Quick-Smith (United Kingdom) for the employers' group, and Mr. Harold E. Clay (United Kingdom) for the workers' group.

Representatives of the following 22 countries were present at the meeting: United States of America, Australia, Belgium, Canada, Chile, China, Denmark, France, United Kingdom, Greece, India, Italy, Mexico, the Netherlands, Norway, Peru, Poland, Portugal, Sweden, Switzerland, Turkey and South Africa. All these countries were represented by tripartite delegations, except China and Greece, which were represented by Government delegates only. The meeting was also attended by one observer from Finland; the Government of Finland had applied for membership of the Committee but its request has not yet been considered by the Governing Body. A

total of 148 representatives from the above-mentioned countries attended the meeting, *i.e.*, 53 members and advisers representing Governments, 48 representing employers, 46 representing workers and one observer from Finland.

In addition the United Nations were represented at the meeting by Mr. Branko Lukač, Miss Helen Moats and Mr. H. J. Halbertsma, and the European Central Inland Transport Organisation by Mr. Jean Lévy. Two observers attended on behalf of the International Transport Workers' Federation, Mr. J. H. Oldenbroek and Mr. P. Tofahrn.

Work of the Committee

Four reports were presented to the Committee by the International Labour Office, one on each item of the agenda which had been fixed for the meeting by the Governing Body. The first was a general report concerning the action taken in the various countries and by the I.L.O. since the first session and including a section on recent developments in the inland transport industry.[1] The other three reports dealt respectively with employment in inland transport[2], industrial relations in inland transport [1] and inland transport statistics.[1]

Several sittings of the Committee were set aside for a discussion of the general report, in which a large number of members took part. Contributions were also made to the general discussion by the representatives of the United Nations, the European Central Inland Transport Organisation and the International Transport Workers' Federation.

Subcommittees were appointed to examine the other three reports and to consider what conclusions should be adopted as a result. The report on employment in inland transport contained chapters on the employment situation in the various branches of transport in the different countries, the employment trends in the transport industry, and the organisation of employment, with particular reference to the recruitment of workers and vocational training. The report on industrial relations drew attention to the special aspects of industrial relations in the transport industry; outlined the general features of legislation and practice in regard to the legal status of trade unions, methods of determining conditions of employment, the machinery for dealing with labour disputes and the subject of labour-management economic collaboration; and examined existing industrial relations in the transport industry in selected countries. Finally the report on inland transport statistics examined the field to be covered by inland transport statistics, the problems involved in improving the international comparability of such statistics, the nature of the labour statistics required by the Committee and the means of making them comparable. Each of the subcommittees held several sittings and produced reports and resolutions for the consideration of the full Committee.

A further subcommittee was set up to consider the problems of workers engaged in navigation on the Rhine, which had been mentioned in the general report. The subcommittee consisted of repre-

[1] For notes on these reports, cf. *International Labour Review*, Vol. LV, Nos. 3-4, Mar.-Apr. 1947, p. 345.

[2] For a note on this report, cf. *idem*, No. 5, May 1947, p. 480.

sentatives of the Governments, employers and workers of the countries immediately concerned. Its sittings were also attended by Mr. P. Berryer, Assistant Secretary-General of the Central Committee for Rhine Navigation, who was present as an observer.

A large number of other questions were mentioned in the general discussion. Resolutions on some of the subjects were submitted by various members and were examined by the Steering Committee—acting as a resolutions committee—before being presented to the full Committee for consideration and adoption at the end of the session.

Industrial Relations

The Subcommittee on Industrial Relations consisted of 48 members (16 Government, 16 employers' and 16 workers' members). The Subcommittee elected Mr. Tennant (United Kingdom Government member) as its chairman, and Mr. Loomis (United States employers' member) and Mr. Orynski (Polish workers' member) as its vice-chairmen. As a basis for its discussions the Subcommittee took a draft resolution which had been prepared by the International Labour Office. The draft resolution dealt in particular with freedom of association, the determination of conditions of employment, the adjustment of labour disputes, and machinery for co-operation between management and labour. Considerable discussion took place on the general principles set forth in the draft and also on the details of the various articles, with the result that the Subcommittee was able to reach unanimous agreement on a revised text.

The resolution, as finally approved by the Subcommittee, contained 22 articles. It declared that the provision of efficient transport services and of satisfactory conditions of employment for transport workers necessitates the promotion of good relations between management and labour and accordingly made proposals concerning the principles, methods and machinery by which the relations between management and labour in the inland transport industry should be conducted.

On being submitted to the Inland Transport Committee at the close of the session the resolution was adopted unanimously.

Employment

The Subcommittee on Employment comprised 49 members (21 Government, 14 employers' and 14 workers' members). Each of the Government members had four votes and each of the employers' and workers' members six votes. The following Officers were appointed by the Subcommittee: chairman, Mr. De Sevilla (Mexican Government member); vice-chairmen: Mr. Quick-Smith (United Kingdom employers' member) and Mr. Ouradou (French workers' member).

The Subcommittee had before it two resolutions prepared by the International Labour Office, one concerning the steps which might be taken with regard to the attainment of a high and rising level of employment in the inland transport industry, the placing of workers, the development of schemes of apprenticeship and vocational training and similar matters; and the other concerning the regularisation of the employment of port transport workers.

After considering these texts the Subcommittee proposed three resolutions for adoption by the full Committee. The first dealt with the general problem of employment in inland transport, including the achievement of a stable and maximum level of employment, the placing of workers in employment, the development of schemes of apprenticeship and vocational training and retraining, facilities for promotion, and arrangements for the exchange of vocational training instructors and trainees in the different branches of the inland transport industry. The second resolution invited the International Labour Office to make a study of the problem of vocational guidance and the technical selection of workers, which has special aspects of great importance to the employers and workers of the various branches of the inland transport industry and to the general public. In the third resolution the Subcommittee suggested that the International Labour Offic should make a study of the problem of the decasualisation of dock labour and submit proposals on this question to the Inland Transport Committee at its next session.

All three resolutions were unanimously adopted by the full Committee.

Statistics

The Subcommittee on Statistics was composed of 18 members (6 Government, 6 employers' and 6 workers' members). The officers elected by the Subcommittee were: Mr. De Vos (Belgian Government member), chairman; Mr. Shrosbree (United Kingdom employers' member) and Mr. Helgesson (Swedish workers' member), vice-chairmen. Two draft resolutions, prepared by the International Labour Office, were examined by the Subcommittee. One of these was of a general character and suggested action by which the data needed by the Inland Transport Committee could be obtained, and the other made detailed recommendations on certain specific issues.

After an exchange of views the Subcommittee came to the conclusion that most of the existing inland transport statistics revealed gaps and that they were not always comparable from an international standpoint. The Subcommittee accordingly examined the draft prepared by the Office and agreed to draw attention to the necessity of assembling and publishing fuller statistics in the field of labour and also to define the points on which the statistics required by the Committee should bear. It was also agreed that it would be advisable for the International Labour Office to enter into contact with other international organisations which might be able to contribute to the provision of inland transport statistics.

Accordingly, the Subcommittee agreed to propose two resolutions to the full Committee—one concerning the establishment of inland transport statistics both by the I.L.O. and by other international organisations, and the other concerning the detailed arrangement of internationally comparable statistics on inland transport. In view of the fact that an International Conference of Labour Statisticians is to be held in 1947 the Committee proposed a further resolution in which it asked the Governing Body to communicate its proposals to the Conference in order that the Conference might examine the problems dealt with by the resolutions and consider what action might be taken in regard to them.

These three resolutions were submitted to the Inland Transport Committee and adopted unanimously.

Rhine Navigation

The Subcommittee on Rhine navigation consisted of 18 members (6 Government, 6 employers' and 6 workers' members) from the following countries: United States of America, Belgium, France, the United Kingdom, the Netherlands, and Switzerland. The Subcommittee elected the following officers: chairman: Mr. Cottier (Swiss Government member); vice-chairmen: Mr. van Loon (Netherlands employers' member), and Mr. Cassiers (Belgian workers' member). The Subcommittee examined the problems arising out of the coexistence of different national laws and regulations concerning social security and conditions of work, applying to workers employed by the shipping companies engaged in Rhine navigation in all the States bordering on the Rhine and in Belgium. The Subcommittee agreed that the existence of different social security laws resulted in hardship to the workers, and that in matters concerning the conditions of work of workers engaged in Rhine navigation difficulties arose not only because of the differences in national laws and regulations but also because of the existence of different collective agreements in several of the countries concerned.

After a discussion of social security problems and of questions relating to conditions of work, the Subcommittee proposed that the attention of the Governments concerned should be drawn to the problems and that the Governments should be asked to consider holding a special tripartite conference to draw up the drafts of conventions on these matters. It was further agreed that the International Labour Office should be asked to prepare a detailed report providing the necessary documentation for such a conference.

A resolution on these lines was accordingly adopted by the Subcommittee. The Inland Transport Committee subsequently agreed that this resolution and the report of the Subcommittee on Rhine navigation should be transmitted to the Governing Body of the I.L.O. for consideration.

General Resolutions

As already indicated, the Committee adopted a number of resolutions in addition to those included in the reports of the Subcommittees. Some of these suggested action by the I.L.O., either alone or in co-operation with other international organisations, and others were addressed to Governments and to the organisations of employers and workers in the different countries. All these resolutions were adopted unanimously by the Committee.

Co-ordination of transport. In a resolution concerning the co-ordination of the various forms of the transport industry, which was proposed by the Australian Government delegation, the Committee recalled that in its resolution on employment it had recommended that careful consideration should be given to co-ordinating the different branches of the inland transport industry with a view to providing efficient services and ensuring the fullest and most effective employment of transport workers; it therefore requested the Governing Body of the I.L.O. to make arrangements with the United Nations for a study of the co-ordination of transport by the

competent international bodies, with which the International Labour Office should be associated. The Committee further expressed the view that while awaiting the results of this study, which will be indispensable for its future activities, the International Labour Office should continue to examine the influence of the structure of the transport industry upon conditions of labour and employment in this industry.

Automatic coupling. A resolution on this subject had been adopted at the first session of the Inland Transport Committee in London, and an account of the action taken in pursuance of this resolution was given in the general report to the second session. At the suggestion of the workers' group the Committee considered the matter again and adopted a further resolution on the subject, which took account of the present position as explained in the general report, and of the financial and technical difficulties, as well as the limited possibilities existing at the present time. In the resolution the Committee expressed its confidence that the Governing Body and the I.L.O. Committee on Automatic Coupling, which was re-established in 1946, will pursue the matter, in co-operation with the other competent bodies, and take the necessary steps to implement the resolution on automatic coupling adopted at the first session of the Inland Transport Committee.

Accident insurance. On the motion of the French workers' member the Committee adopted a resolution pointing out that operations in the transport industry involve the risk of injury to persons or damage to property, that adequate compensation should be paid in respect of such injury and damage, and that a transport worker who is the cause or the victim of an accident may suffer if his employer is uninsured or unable to satisfy a claim for compensation. The resolution accordingly suggested that Governments be recommended to take steps to provide for compulsory insurance in respect of such claims for compensation, except where a guarantee is provided that the payment of compensation is otherwise reasonably assured.

Studies and enquiries. Four resolutions invited the Governing Body to instruct the International Labour Office to undertake certain studies and enquiries and to submit the results to future sessions of the Inland Transport Committee.

One of these resolutions, which was proposed by the workers' group, drew attention to the changes in road transport as a consequence of war and post-war conditions and asked that the Hours of Work and Rest Periods (Road Transport) Convention, 1939, be examined with a view to ascertaining whether the Convention meets the requirements of the post-war situation.

A second resolution, proposed by the French Government member, asked for a study of the problems raised by the employment of women in the transport industry, in view of the fact that a large number of women are employed in the various branches of inland transport in many countries.

In another resolution, submitted by the United States Government, employers' and workers' members, the Committee referred to the need for further information concerning the application to inland

waterways of national laws and regulations providing protection for young workers, and to the vocational training needs of young workers in this branch of the inland transport industry. In view of these considerations, the Committee suggested that the International Labour Office should continue to study the provisions of national laws and regulations for the protection of young workers in inland navigation, and that it should make a study of vocational training, apprenticeship and vocational guidance for such workers, and of educational facilities and training for the children of boatmen on inland waterways. The resolution suggested that a report on these matters, with appropriate recommendations, be formulated for the Committee's consideration.

A further resolution, submitted by the workers' group, drew attention to the need for avoiding unsatisfactory conditions of employment in national and international air transport and suggested that information be prepared by the International Labour Office, in collaboration with the International Civil Aviation Organisation and other appropriate international bodies, to enable the Committee to consider the matter at an early session. It was suggested that the material to be prepared should consist of a study of conditions of employment in civil aviation, with special reference to the problems peculiar to the employment of aircrews, with a view to the eventual consideration of a code of minimum conditions of employment in civil aviation ; and information on existing or proposed measures for co-ordination between civil aviation and other forms of inland transport which might affect conditions of labour and employment in the inland transport industry.

Application of the Committee's proposals. Finally, a resolution proposed by the French workers' member drew attention to the need for the early application of the proposals and resolutions adopted by the Committee. The resolution noted that the authority of the International Labour Organisation is based, not only on the value and effectiveness of its proposals but also on the speed with which these proposals are given practical application. It pointed out that delays and postponement lead to discouragement and disaffection and requested Governments and employers' and workers' organisations to examine as speedily as possible the proposals and resolutions adopted by the Committee and to take the necessary action for putting them into effect.

Conclusion

This second session of the Inland Transport Committee, coming immediately after the second session of the Coal Mines Committee, confirmed the impression that the Industrial Committees will be able to propose practical solutions for the problems of their respective industries and to follow up their work from meeting to meeting. Over one third of the members present at the second session had attended the first meeting in London and were thus able to help in assuring the necessary continuity in the treatment of the problems. An example of this continuity was provided by the discussion on industrial relations : at the London meeting a first general resolution had been adopted on industrial relations in inland transport, and

this was followed at the second session by the adoption of a further text, which both developed the general principles in more detail and introduced new ideas based upon the experience of the intervening period.

General satisfaction was expressed with the results of the meeting and particularly with the atmosphere in which it took place. It is worthy of note that all the subcommittee reports and all the resolutions were adopted unanimously.

INDUSTRIAL AND LABOUR INFORMATION

INTERNATIONAL LABOUR ORGANISATION

India and the Maritime Conventions

A discussion on the possibility of further ratifications by India of International Labour Conventions on maritime questions took place in the Indian Central Legislative Assembly on 12 November 1946.

Miss Maniben Kara, Vice-President of the Maritime Union of India, asked whether the Government of India proposed to speed up the ratification of I.L.O. maritime Conventions in general, and in particular to ratify those adopted at the Seattle Conference. In this connection she emphasised the dissatisfaction of Indian seafarers with their existing conditions of employment.

Mr. I. I. Chundrigar, Commerce Member, stated in reply that the ten earlier maritime Conventions which India had not so far ratified were at present under consideration and that it was the aim of the Government to ratify or accept as many as possible of the Seattle Conventions, Recommendations and Resolutions.[1] Such a course would, of course, involve a number of changes, but the Seattle decisions were being examined and would be submitted to the Legislature as soon as possible. He gave assurances that the opinions of seafarers' organisations would be considered before ratification of any of the Conventions.[2]

In a deputation to Mr. Chundrigar and to Dr. John Matthai, the Transport Member, on 13 March 1947, Miss Kara, Mr. D. S. Mungat and Mr. S. A. Azad, all officials of the Maritime Union of India, urged that the Government should appoint a committee to enquire into the conditions of service and recruitment of seafarers, and that this committee should report to the forthcoming meeting of the Asiatic Labour Conference. The Government were also requested to invite I.L.O. maritime officials to visit India. The deputation further asked that the wartime grant of railway concession rates to Merchant Navy officers should be continued, as was being done in other countries.[3]

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[1] See "The Twenty-Eighth (Maritime) Session of the International Labour Conference", *International Labour Review*, Vol. LIV, Nos. 1-2, July-Aug. 1946, pp. 1-28.
[2] *Legislative Assembly Debates Official Report*, Vol. VIII, No. 1, 12 Feb. 1946, pp. 847-849.
[3] *The Statesman* (Delhi), 14 Mar. 1947.

Publications of the Office

Reports for the 30th Session of the International Labour Conference

The Office has recently published the *Report of the Director-General*, which forms the first item on the agenda of the 30th Session of the International Labour Conference, due to open at Geneva on 19 June 1947. The second report on the subject of employment organisation, the fifth item on the agenda, has also been published. Information on these reports will be found in the "Bibliography" section.[1]

Obituary

Sir Granville Orde Browne

The Office has heard with sincere regret of the death on 12 May 1947 of Sir Granville Orde Browne, C.M.G., O.B.E., Labour Adviser to the United Kingdom Secretary of State for the Colonies.

Sir Granville Orde Browne, who was born in 1883, was appointed, after a period of service in the Royal Artillery, to the post of Assistant District Commissioner in the East African Protectorate in 1909. Appointed Senior Commissioner in Tanganyika in 1921, he became Labour Commissioner in 1926, and retired from that post in 1931. While working in Tanganyika, he published an anthropological study on "The Vanishing Tribes of Kenya", and in 1933 he published a book, prepared under the auspices of the Institute of African Languages and Cultures, entitled "The African Labourer" which established his reputation as an expert on African labour problems.

In 1938, he was appointed to the newly created post of Labour Adviser in the Colonial Office; in that capacity he travelled widely and published valuable reports on labour conditions in the West Indies, West Africa, Ceylon, Mauritius, Malaya, and East Africa. He also conducted investigations of the conditions of Native labour in the Belgian Congo, Portuguese East Africa and Northern Rhodesia.

In 1933, the Governing Body of the International Labour Office appointed him as substitute member (for Lord Lugard) of the Committee of Experts on Native Labour. He subsequently attended the Sessions of the International Labour Conference in 1938, 1939, 1944, 1945 and 1946 as U.K. Government adviser. As recently as March 1947, he attended the first session of the Committee of Experts on Social Policy in Non-Metropolitan Territories as substitute member for Sir Wilfrid Jackson.

He brought to the study of labour problems in colonial territories a keen and sincere interest in and sympathy with the Native populations, and the strength and integrity of his character, combined with his vast knowledge and practical experience, made him an outstanding figure in the numerous international meetings that he attended for the discussion of the problems that he had so much at heart. The International Labour Office loses in him a highly valued friend and counsellor.

Charles Jarman

The Office heard with deep regret the news of the sudden death of Mr. Charles Jarman, Acting General Secretary of the National Union of Seamen in the United Kingdom, and President of the

[1] See below, p. 599.

Seamen's Section of the International Transport Workers' Federation. Mr. Jarman had recently been ordered to take some months' rest, from which he returned to work apparently restored in health, but he collapsed suddenly in his office on 30 May 1947 at the age of 54.

Charles Jarman followed his father as an active member of the National Union of Seamen, becoming a union delegate in 1915 and Acting General Secretary in 1941. He was also an energetic member of the executives of a variety of associations for promoting the welfare of seafarers. A fair and fearless fighter, he had a long record of achievement on behalf of the seafarers of his own country. One of his latest tasks was the conduct of the lengthy negotiations for the preparation of the new series of collective agreements covering the wages, hours, leave and stability of employment of seafarers in the United Kingdom, to which reference has already been made in these pages.[1]

But from the standpoint of the Organisation it is Charles Jarman's international work that will remain as his outstanding achievement. It was in 1933 that he first attended the Joint Maritime Commission as a substitute for Mr. Spence. During the war years he took an active part in the work of the Commission, and he was one of those who was again elected to it at the 28th Session of the Conference in Seattle. He quickly established his position as one of the leaders of the Seafarers' Group on the Commission, at the Maritime Preparatory Conference at Copenhagen and at the Seattle Conference, where he was chairman of the workers' group. He appreciated the value of international co-operation between seafarers of different countries, and he fully realised the need for thinking internationally in the preparation of Conventions intended to cover the seafarers of countries with widely different traditions and standards of living. The London *Times*, referring to his international outlook, said : " Apart from the agreement about wages and conditions for British seamen already referred to, his deepest satisfaction in the last year of his life came from the success of the I.L.O. Maritime Conference in Seattle last year, when Conventions were adopted which owed much to the International Seafarers' Charter, which he helped to draft ".[2]

His death is a great loss both to his own union and to the cause of seafarers internationally, for in both fields he served his constituents faithfully and effectively without sparing himself. It is to the strain of his work on their behalf that his untimely death must largely be attributed.

SOCIAL AND ECONOMIC POLICY

India's Health Programme

The Committee appointed by the Government of India in 1943, under the chairmanship of Sir Joseph Bhore, to study health conditions and to make recommendations for future development, recently presented a report containing a survey of the state of public health and outlining a forty-year programme for the establishment of a complete health service for the entire population, with special attention to the needs of rural districts, and a ten-year programme on similar lines but limited in scope by the financial resources and trained personnel at present available. The inauguration of the All-India Medical Institute Committee at Delhi in February 1947

[1] Cf. *International Labour Review*, Vol. LV, Nos. 3-4, Mar.-Apr. 1947, p. 307.
[2] *The Times*, 3 June 1947.

was the first step to implement one of the recommendations contained in the report. The Committee will advise the Central Government on the practical measures to be taken to establish an All-India Medical Institute for the training of medical personnel and for research.

The plan for the organisation of health services is summarised below. The detailed suggestions contained in the report are intended to serve as a guide, and must, of course, be modified to meet local conditions.

Forty-Year Programme.

The Committee recommends that health services be organised both at the Central and provincial level with a Central Statutory Board of Health consisting of representatives of the Central and provincial Governments to promote mutual consultation and to secure co-ordination in formulating the health policy and carrying it out. According to the proposed plan, the Ministry of Health at each level is the ultimate authority responsible for all health services within its jurisdiction. A council of experts, including representatives of the medical and allied professions, provides technical guidance. In each administration there is an administrative officer (Central Government, the Director-General of Health Services; provincial Government, Director of Health Services) responsible for the curative and preventive departments of health, *i.e.*, administration, medical care, public health, professional education and research, public health engineering, and town and village planning. Health services are also organised at the local level on the basis of the administrative district under an officer responsible for curative and preventive care in the area. Health authorities in the district are represented on a District Health Board which is aided by a District Health Council of experts.

Health services are provided at primary, secondary and district headquarters units. A primary unit, serving some 20,000 persons, has a 75-bed hospital, as well as dispensaries, and is staffed by six medical officers, two or three of whom are women, hospital and public health nurses, midwives, sanitary inspectors and health assistants. Care is given at the hospital and dispensaries, four public health nurses carry on preventive work in the homes of the people and two public health nurses and two medical officers are available to give domiciliary curative care. A secondary unit includes 30 primary units and has a 650-bed hospital and medical staff of 140 doctors. The heads of the various hospital departments guide and inspect the work of the primary units within the secondary unit. The district headquarters organisation is responsible for the health of some 3,000,000 persons in five secondary units. It is staffed by 267 medical officers and has a 2,500-bed hospital to which complicated cases from smaller hospitals are removed. The officer in charge of the District Health Services and his deputies are responsible for medical care, public health, environmental hygiene, maternity and child welfare work.

The Committee stresses the view that preventive and curative health work should be dovetailed into each other to produce the maximum results and recommends the employment of social workers. A certain number of the doctors working in secondary units and district headquarters organisations provide curative and preventive care on a part-time basis. Eventually, the Committee hopes their services will be available to the healthy members of the community and the organisation will tend to become a whole-time salaried service devoting itself to the development of the health of the people.

Ten-Year Programme.

The Committee is of the opinion that health services should be introduced on as wide a territorial basis as possible, and its short-term programme, covering two stages of five years each, is briefly as follows. District health centres are not set up during this period, but district health organisations supplement existing health facilities by preventive and curative care provided through primary and secondary units, and special services dealing with malaria, tuberculosis, venereal disease, leprosy, mental diseases, maternity and child welfare, school health, dental services and nutrition are to be developed. Field training centres for teaching institutions are set up and special arrangements made for training medical social workers.

In order to encourage the co-operation of the people in the development of the scheme, there are health committees of voluntary workers in the villages. Curative care and preventive care are provided on a co-ordinated basis, but special emphasis is placed on the latter since the Committee considers that, in view of the limited staff and funds available, it will yield the more lasting health results.

Five primary and one secondary unit, less fully staffed and equipped than the units of the long-term scheme, are established simultaneously in each district. During the first ten years a primary unit provides curative and preventive care to some 40,000 persons. A secondary unit at first supervises five primary units but when the population covered by the scheme in any district exceeds 600,000, an additional secondary unit is established. In organising these units existing district subdivisions are followed. Thirty-bed hospitals are attached to each primary unit, and larger hospitals with laboratory facilities to each secondary unit. At the end of ten years, according to the plan, there will be 25 primary units and two secondary units in each district, with 13 thirty-bed hospitals, one 200-bed hospital and one 500-bed hospital.

Finance.

The Committee is of the opinion that medical services should be free to all and that the scheme should be financed by general and local taxation. It considers that the Central Government with its larger resources should give financial assistance to the provincial health schemes and suggests that the Central Statutory Board of Health should make recommendations to the Central Government as to the distribution of grants-in-aid for this purpose.[1]

Dock Labour Board in Curaçao

An Ordinance of 8 July 1946 was brought into force in Curaçao on 21 September 1946 setting up a Dock Labour Board under the Department of Social and Economic Affairs. The Board is to provide the only labour pool for all stevedoring concerns, and will also deal with social work.

Every dockworker and stevedoring concern must be registered with the Board before being allowed to work on the docks or carry on stevedoring work. It is prohibited and punishable by law to engage dockworkers who are not registered. The worker is paid by the Board, which receives compensation from the stevedoring concerns for the wages paid.

The workers are classified into regular staff, reserve workers and casual workers, each class having different rights and duties. The first class consists of workers who have worked in the harbour for not less than one year and have earned 900 guilders for such work during the first six months of 1946. They must satisfy certain physical standards and have attained the age of eighteen years, and must live as close to the harbour as possible and report for work twice a day. They have a guaranteed minimum wage of 25 guilders per week, whether they work or not. The second class of workers consists of those who have earned 600 guilders while working in the harbour during the first six months of 1946, satisfy certain physical standards and have attained the age of eighteen years. They are bound to report for work twice a week. The third class consists of workers who satisfy certain physical standards and have attained the age of eighteen years.

Workers must observe the labour rules and obey the instructions of the Inspector, who is the head of the Board. The Inspector is nominated by the Government, and is assisted by a committee of three employers and three workers, which advises him on all questions with which the Board is called upon to deal. Special provisions are made with reference to the suspension or dismissal of a worker.

Registration with the Board does not affect the right of association.[2]

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[1] *Report of the Health Survey and Development Committee* (Delhi), 1946, 4 vols.
[2] *Publicatieblad*, No. 110 of 1946.

INDUSTRIAL RELATIONS

Industrial Relations in Netherlands West Indies

During 1946 machinery for the peaceful settlement of labour disputes was set up in Surinam and Curaçao.

Conciliation Board in Surinam

By an Ordinance of 26 September 1946, a Conciliation Board to promote the settlement of labour disputes was set up in Surinam.

One Board was set up for Surinam as a whole, but the Governor is empowered to establish additional boards if necessary. The Board consists of from three to five members, including a chairman. The members are nominated by the Governor. Employers, employees or trade unions can make application to the Board.

Competence.

The Board is competent only in the case of a dispute which threatens to give rise to, or has already caused, strikes or lockouts in one or more undertakings. The Board is not competent with regard to the following: cases in which the parties have their own conciliator or arbitrator; cases in which the dispute has been caused by action on the part of one of the parties calculated to avoid compliance with the terms of a collective agreement or the decision of a conciliator or arbitrator; and cases which fall within the competence of a court of law. When agreement has been reached, a memorandum is drawn up and signed by both parties.

Arbitration.

The same Ordinance refers to another means of settling labour disputes, namely arbitration. The parties bind themselves, by means of a memorandum drawn up in the presence of the Chairman of the Conciliation Board, to submit the dispute to an Arbitration Board or an arbitrator. This memorandum contains, *inter alia*, the points of dispute to be brought before the Arbitration Board and the duration of the arbitration decision. If the two parties so request, the Conciliation Board is required to act as an Arbitration Board.

The provisions of an arbitration decision dealing with labour conditions become part of the contractual obligations of the parties concerned for the duration of the arbitration decision. The Governor is empowered to reverse a decision or to order its revision in the following circumstances: cases in which a decision has not taken into account the provisions of the memorandum by which the parties bound themselves to submit the dispute to an Arbitration Board; cases in which the proceedings do not comply with the provisions of this Order; cases in which the decision or the memorandum was based on falsified documents or on false statements.[1]

Government Conciliator Appointed in Curaçao

By an Ordinance of 23 July 1946 containing provisions to promote labour peace, a Government Conciliator has been appointed in Curaçao and Aruba.

If a dispute involving at least 25 labourers threatens to give rise to a strike or lockout, the parties concerned are obliged to submit their dispute for mediation by the Government Conciliator. In disputes involving fewer than 25 labourers, the parties concerned may, if they so choose, submit their dispute for mediation proceedings.

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[1] *Gouvernementsblad*, No. 104 of 1946.

The Conciliator is not competent with regard to the following : cases in which the parties have their own conciliator, unless attempts at conciliation have failed ; and cases which fall within the competence of a court of law. The Conciliator is empowered to order the appearance before him of the disputing parties. Failure to comply with this order is a punishable offence. His duties are to seek to bring about settlement of the dispute and offer advice with regard to labour conditions.

The dispute can also be submitted for arbitration. The parties bind themselves by means of a memorandum, drawn up in the presence of the Conciliator, to submit the dispute to an Arbitration Board and to abide by its decision. [1]

Further to this Ordinance, an Ordinance of 20 December 1946 was promulgated by which the Conciliator is obliged to inform the Governor in case of a threatened strike or lockout. The Governor is empowered to fix a term (maximum 30 days), during which time a strike or lockout is prohibited. Contravention of this provision constitutes an offence punishable by a maximum penalty of one year's imprisonment or a fine of 600 guilders. [2]

EMPLOYMENT

Vocational Training in South and Central America

The Governments of Brazil, Chile, Honduras, Peru and Venezuela have taken measures during 1946-1947 for furthering technical education and vocational training.

Training in Agriculture in Brazil

On 20 August 1946 the President of the Brazilian Republic promulgated a Legislative Decree, No. 9613, putting into effect a basic agricultural education act, which is intended to provide vocational training for agricultural workers.

General Principles of Agricultural Education.

The Decree states that, in providing agricultural education, account is to be taken of : *(a)* the interests of the agricultural workers in providing facilities for technical agricultural training and for general education ; *(b)* the interests of the agricultural undertakings, in making available a suitable and sufficient labour supply for their developing needs ; *(c)* the interests of the nation, in ensuring efficient mobilisation of its resources to contribute to its total economy and culture. Instruction on the theory and practice of agriculture should therefore be mutually complementary. It is recommended that excessive or premature specialisation should be avoided so as to permit any necessary changes in occupation. Finally, women have the same rights to instruction as men, subject only to considerations of physical fitness.

Organisation of Courses.

The first stage of agricultural education comprises ordinary courses of vocational training, practical courses for acquiring a simple basic agricultural training and special courses for perfecting skill or for purposes of specialisation. At the second stage, the instruction includes technical courses for agricultural technicians and courses for the training of teaching staff.

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[1] *Publicatieblad*, No. 119 of 1946.
[2] *Idem*, No. 188 of 1946.

The ordinary courses of the first stage are divided into two parts ; *(a)* introductory agricultural courses, and *(b)* courses for the training of rural craftsmen, open only to students who have completed the introductory courses.

The Decree contains provisions for the co-ordination of these various courses, and of agricultural education in general, with other branches of education, in order to permit changes in occupation, if desired, or continuation of studies beyond the stage of vocational training proper to that of university education. Admission to the agricultural training course is open to pupils of 12 years of age who have completed their primary education. These courses are a prerequisite for admission to the courses for the training of rural craftsmen. For admission to the technical agricultural course, the first stage of general secondary education or the first stage of a teachers' training course must have been completed. Lastly, admission to courses for agricultural instructors requires the completion of an agricultural technical course. Students who have completed the introductory agricultural and rural craftsmen courses receive diplomas as agricultural workers and rural craftsmen respectively. Diplomas as agricultural technicians and rural teachers are granted to those who have completed the technical and teachers' training courses respectively.

Establishment and Organisation of Agricultural Training Schools.

The agricultural schools are divided into three different types : *(a)* primary agricultural schools ; *(b)* agricultural training schools, and *(c)* technical agricultural schools. The first type is intended to offer introductory agricultural courses only ; the second, courses for rural craftsmen and introductory agricultural courses ; and the last includes the training provided in the other two types and provides in addition technical agricultural courses.

The Decree also provides for the general administration of the schools, including the selection of teachers.

In addition to the agricultural schools set up and administered by the Federal Government, the State authorities and authorised private individuals and organisations may set up such schools subject to Government approval. [1]

Girls' Technical Schools in Chile

A Chilean Decree, No. 9141 of September 1946, approves regulations for girls' technical schools under the Directorate-General of Vocational Education.

Personnel.

The regulations cover managerial, administrative and teaching staff. There is to be a Teachers' Council, an advisory body on teaching matters, to consist of all the teaching staff, the principal, the inspector and the administrative personnel. The chief function of the Council will be to give an opinion on any matter relating to instruction or to the conduct of the establishment.

Entry.

Candidates for admission as pupils must fulfil the following conditions : *(a)* be physically fit for the intended course of study ; *(b)* have a good record for conduct and character ; *(c)* possess a general education corresponding to the sixth class of the elementary school ; *(d)* be not less than 14 years old. Furthermore they must hold various certificates, including one of good health (issued by a local doctor) and one from the last school attended, stating the period of attendance, the subjects studied and the results of the last examinations.

Other Provisions.

The regulations relate also to registration, date of application, fees and exemption therefrom, and the internal rules of each establishment. The regulations

[1] *Diário Oficial*, 23 Aug. 1946. Legislative Decree, No. 9614 of the same date provides for interim measures to apply Legislative Decree No. 9613 ; Decree No. 21667 of the same date lists the agricultural courses to be given in the different types of agricultural training schools.

cover excursions, which are to be of two sorts: regular visits for pupils in the senior classes to scientific and industrial centres connected with the trades studied and excursions of a cultural or recreational character for all pupils.

Each establishment will have a medical service consisting of a doctor, a dentist and the necessary subordinate staff.

Profits.

Fifty per cent. of the annual profits of each establishment are to constitute savings for the pupils, which they will receive at the end of the course; 10 per cent. are to go into a welfare fund for the establishment; the remaining 40 per cent. will be treated as effective income.[1]

Technical Education in Honduras

By Decree No. 91 of March 1947 the National Congress of the Republic of Honduras issued a Public Education Code, Chapter VI of which is entirely devoted to technical education.

The object of technical education, the Code states, will be to train skilled personnel for industry, commerce, agriculture, and other activities or occupations.

Types of School.

Technical education will be given at *(a)* commercial schools, to give training in accountancy to persons who wish to enter the business side of commercial firms, banks, mines, farms, etc. (four-year course); *(b)* agricultural schools, which offer training in scientific farming (three-year course); *(c)* domestic schools, which will train girls in domestic duties (three-year course). Furthermore, it is provided that the Executive may found technical schools of other types according to the industrial or agricultural requirements of the country.

Admission.

In order to be admitted to any of these technical schools, candidates must: *(a)* be of good conduct, and not less than 14 years of age (or complete their 14th year within six months of the opening of the course); *(b)* have duly passed out of an urban primary school; and *(c)* be free of contagious diseases.

Other Provisions.

The Code deals also with other types of schools not strictly classified as technical but providing facilities for apprenticeship. These are as follows: *(a)* supplementary schools, consisting of three grades, intended to provide a minimum of primary education to adults who have not attended elementary school, the education to be combined with apprenticeship; *(b)* continuation schools, providing three years' study after completion of the first three years of primary school (this continues general education, particularly in relation with local or regional trades, and provides elementary apprenticeship or training in certain occupations); and *(c)* schools of applied arts, which include classes for the training of handicraftsmen. The course here lasts four years and is divided into four sections according to the subjects chosen (work-shop training, general artistic culture, technical subjects and the training of teachers).[2]

Peruvian Plan for Technical Education

The Peruvian Government is now putting into effect the Technical Education Reorganisation Plan approved by Resolution of the Legislature No. 3699 of 15 December 1945, and for this purpose

[1] *Diario Oficial*, 17 Oct. 1946.
[2] *La Gaceta*, 19 Apr. 1947.

has recently adopted a number of measures dealing respectively with workers' training courses [1], the Apprenticeship Plan [2], schools for agricultural overseers [3] and training and further training courses for teachers, including vacation courses.[4]

Workers' Training Courses.

These are intended to give each worker a clear and detailed knowledge of his subject and enable him to understand constructional diagrams of tools and machinery. Instruction will be given by evening classes, extending over an indefinite period, but generally about two years. There will be both theoretical and practical instruction, the former following model schedules based on job analysis and adapted to the skill requirements of each trade, the latter taking place in the factory or workshop. Pupils will be selected by competition in accordance with the available vacancies on each course. Workers who pass the course will receive a certificate of study, and may register either for a preparatory course for entry into the secondary industrial colleges established previous to the Technical Education Reorganisation Plan, where pupils can continue their studies to the university level by following the normal courses of study, or for an industrial training course of about one year, on completion of which they are admitted to the grade of skilled worker. If in either of these cases instruction is given during the day-time, the Government will provide subsistence for the worker and his family during the course of study.

Apprenticeship Plan.

This covers young workers who wish to study a craft or technical occupation while continuing in paid employment. The duration of the course is indefinite and may cover a period of up to three years, during which half the day will be given to theoretical, and half the day to practical studies, not including vacation courses. At the end of their apprenticeship course, successful pupils receive the same certificates and grades as the pupils of the secondary industrial colleges and may subsequently enter a technical institute or take a specialist course. Pupils are selected by competition, according to the vacancies existing in each trade, from youths of between 14 and 20 years of age who have completed their elementary education. The apprenticeship scheme provides not only for vocational instruction, but also for the intellectual, moral and physical development of the pupils. The trades that can be studied are engineering, electricity, woodwork, building, pottery, visual arts and draughtsmanship. The " Polytechnic " workshops provide paid employment for apprentices who wish to undertake such work.

Schools for Agricultural Overseers.

The Ministry of Education has established training schools for agricultural overseers in each of the producing areas of the country in order to train a sufficient number of skilled men who will be able to help the farmers and give their assistance to the various State agricultural and stock-raising undertakings. The length of the course is roughly three years, at the close of which the successful students receive certificates similar to those given by the secondary industrial colleges, and may subsequently attend a course on methods of teaching and technical instruction. Candidates are selected on the same basis as candidates for the apprenticeship plan ; the subjects studied include agriculture, agricultural machinery, stock raising, special crops and rural hygiene, and special emphasis is laid on practical demonstration.

Training and Further Training of Teachers.

In order to meet one of the many urgent needs referred to in the Technical Education Reorganisation Plan, the Ministry has also arranged courses for the

[1] *El Comercio*, 20 June 1946.
[2] *Idem*, 26 June 1946.
[3] *El Peruano*, 11 Feb. 1946.
[4] *Idem*, 29 Jan. 1947 ; *El Comercio*, 3 and 10 June 1946.

training and further training of technical school teachers. There are three main courses, *(a)* training of agricultural science instructors ; *(b)* training of women teachers specialising in domestic science and women's crafts and *(c)* vacation courses for the further training of teachers.

The first of these lasts for eight months, and candidates are selected on the basis of physical, intellectual and professional abilities, general education and character ; before starting the course, they have to sign a contract in which they undertake to serve for three years at a technical school. Students are given instruction regarding the various crops of coastal, mountainous and forest regions. The subjects studied include general agriculture, agricultural machinery, stock raising, special crops, rural hygiene, agricultural book-keeping, and general educational methods and technique. In order to graduate, the trainees must also have practical experience of giving lessons for teachers. The money required to finance these courses is provided in equal shares by the Ministry of Education and the joint Peruvian-United States education fund.

The courses for training women teachers specialising in domestic science and women's crafts are intended for women already serving under the Directorate of Technical Education ; candidates must belong to the second or third grade in the teachers' classification scale, and selection is based on specialised skill and length of service. The usual subjects are : linen work, doll-making, dress-making, toy-making, hat-making, decorative art, machine-embroidery, and weaving. An undertaking must be signed at the beginning of the course, similar to that prescribed for teachers of agricultural science, and trainees must also give practical classes in the same way as the agricultural science teachers. The funds for supporting these courses are also provided jointly by the Ministry of Education and the joint Peruvian-United States education fund.

The vacation courses, as stated above, are intended for the further training of teachers. They are given during the summer and are divided into 12 groups of subjects, a total of 42 courses making up the whole programme ; some of these deal with education and others with various developments in workshop technique. The many subjects on which instruction is given include organisation, recent developments and future plans for technical education, psychotechnical methods and vocational guidance, technical development of visual teaching aids, current employment schemes, traditional Peruvian craftsmanship, popular Peruvian art, health education, domestic economy, workshop practice, management of workshops for women's crafts, and methods of teaching the science of agriculture and stock raising.

Courses of this kind were held in Cusco, Trujillo, Huancayo and Lima during the summers of 1945 and 1946, over a thousand teachers and headmasters taking part each year.

Vocational Training in Venezuela

A Resolution of the Venezuelan Ministry of Agriculture and Stock Raising, No. 2 of 22 February 1947, issued regulations and a programme of study for the school of coffee planting.

Objects of the School.

The full title of the new institution is Practical School of Skilled Workers in the Cultivation of Coffee. Its objects will be : *(a)* to train the necessary personnel in all operations connected with the growing and proper care of coffee, so that knowledge of these matters may spread throughout the coffee areas ; *(b)* to train candidates in the principles of managing a coffee estate, including knowledge of various crops and ancillary industries such as bee-keeping and poultry-breeding ; *(c)* to train the necessary personnel for a national campaign to extend coffee growing.

Admission.

Candidates must fulfil the following requirements : *(a)* be between 18 and 30 years of age ; *(b)* have a certificate of good conduct ; *(c)* have a medical certificate, particularly regarding infectious or contagious diseases ; *(d)* be able to read

and write correctly and have a good knowledge of elementary arithmetic. The regulations also state that candidates fulfilling these conditions and already helping in the coffee extension campaign will receive priority.

Course of Study.

The course will last for a year and consist mostly of practical training. It will cover each of the operations arising in the growing of coffee and proper care of the bean, as well as other crops and ancillary industries. Trainees who successfully complete the programme will receive certificates as specialists in coffee planting.

The regulations also define the powers and duties of the school staff.[1]

Unemployment among Greek Seafarers

Figures have recently been received from the Greek Ministry of the Merchant Marine relating to unemployment among Greek seafarers.[2]

According to this information, the number of seafarers unemployed in Greek ports fluctuated between 2,634 and 5,437 during the different months of 1946, the average over the year being 3,793. For January 1947 the figure was below 3,000. In addition, there were a number of Greek seafarers unemployed in foreign ports, but this figure fell steadily from 1,061 in February to 126 in December 1946. In January 1947 it was 168, mainly in the ports of Cardiff and London.

Another source [3] gives higher figures, presumably relating to the end of 1946, when unemployment reached its peak according to the official figures. The newspaper in question gives a table comparing the number of seafarers employed in different categories during 1939 and the number now unemployed in the same categories. A few of the figures are reproduced below:

Categories	Employed in 1939	Unemployed (end 1946)
Captains	3,000	1,000
Engineers	3,500	1,200
Radio officers	1,000	400
Engineers (motor)	1,000	100
Cooks	800	100
Firemen	4,000	2,000
Able seamen	4,000	2,000
Ratings (sailing vessels)	2,000	200
Stewards	800	200
Second stewards	200	120

The above table shows a much higher ratio of unemployment among masters and engineers than do the official figures, but both sources agree that the highest proportion of unemployed seafarers is among able seamen and firemen, where the figures are 50 per cent. of the numbers employed before the war.

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[1] *Gaceta Oficial*, 24 Feb. 1947.
[2] Figures communicated by the I.L.O. Correspondent in Athens.
[3] *Ellinikon Aima*, 9 Jan. 1947.

CONDITIONS OF WORK

Conditions of Agricultural Workers in Uruguay

An Act to regulate the situation of agricultural workers was issued in Uruguay on 7 October 1946. Its object is to raise the general standard of living in the rural areas, and in particular to provide the agricultural workers with better material conditions and enable them to raise their intellectual and general level. The Act introduces minimum wage rates, a vacation and a family protection scheme, and also contains provisions on housing and education.

Wages.

The first sections of the Act fix the minimum wage rates applicable to all rural workers. No such worker between 18 and 60 years of age may receive less than 30 pesos per month or 1.20 pesos per working day. Young persons between 16 and 18 years must receive at least 18 pesos per month or 0.75 peso per working day. In the case of children under 16 and adults over 60 years, the Child Welfare Council or District Committee respectively will determine the conditions of work and the pay to be applied ; employers are required to keep registers in which they will enter the work done by children under 16 and adults over 60, with the wages paid for such work. A differential may be applied in the case of workers whose capacity is reduced by over 20 per cent. but the resulting wage may not be less than that paid to children under 16 ; the employer must provide the proof of such reduced capacity, and the differential will be fixed by the magistrate after consulting the public medical officer.

Wages must always be paid in currency. Apart from the cash rates indicated above, the employer is required to provide a hygienic dwelling and sufficient food to all persons working in his establishment, and to any members of their families (wife, children, parents) also living there.

Workers not receiving board are entitled to additional payment at the rate of .80 peso a day. If the workplace is situated at less than 5 kilometres from an inhabited locality, and the worker does not receive board, his pay may not be less than 60 pesos a month plus lodging, a supply of the fruit and vegetables produced on the farm, and fuel.

Other Social Benefits.

A most interesting provision of the Act obliges certain employers to hire a specified number of married men with children. In all farms where the real estate is valued at between 15,000 and 50,000 pesos, at least one such worker must be employed ; where the value lies between 50,000 and 100,000 pesos, the corresponding number is two ; and it rises by one more family man for each additional 60,000 pesos of real estate.

All workers must be free on Sundays ; work on that day is permitted in case of urgency, but a rest-day during the week must then be given in compensation.

Each worker with a year's continuous service is entitled to 8 days' vacation with pay. The employer determines the date of the vacation, and must inform the worker of his decision two months in advance.

Compensation for dismissal must be paid except where the worker loses his job by reason of serious misconduct or failure to perform his duties. This is equal to half a month's pay per year of service in the establishment, during the first three years' service. Thereafter compensation will be equal to one month's pay for each year of service. Furthermore, in the case of a worker with children lodged on the farm, the employer must provide transport for the family and its belongings to a place from which there is public transportation.

The employer must make arrangements by which medical care is available to his workes and facilitate school attendance by their children.

A decree is to be issued determining minimum housing requirements.

Administration.

A rural labour protection committee will be established in each district. This will comprise 7 persons—a delegate from the Executive, as chairman ; 3 delegates of the district council, elected on the basis of proportional representation ; the school inspector, the district agricultural officer and the district veterinary surgeon. The committee will inform the authorities, and advise on action to raise the standard of living in rural areas.

Officials will be responsible for supervising the application of the Act ; fines of from 100 to 500 pesos are provided for in case of infringement. [1]

Hours of Work of New Zealand Seafarers

By Act No. 46, assented to on 24 February 1947, to amend the Shipping and Seamen Act of 1908, the New Zealand Government has fixed the hours of work of seafarers at 40 a week.

The Act came into operation on 28 February 1947. It applies to all seafarers whose employment is governed by an agreement with the crew made in New Zealand or who are employed on board a vessel of less than 25 registered tons engaged exclusively in coastal trade.

Under the Act, normal hours of work, whether at sea or in port, may not exceed 8 in any day or 40 in any week. Overtime may be worked if the master of the vessel deems it necessary but this must be compensated for by pay at a higher rate or by means of time off with pay. Normal hours of work and overtime do not include work required for the safety of the vessel or for the purpose of assisting other vessels or persons in distress, or time spent in lifeboat and similar drills. Nor do they include normal and necessary work by the officers for the determination of the ship's position or for making meteorological observations, or work required for the normal relieving of watches. These normal hours of work and the special duties excluded from them are entirely in accordance with article 18 of the Convention on Wages, Hours and Manning adopted at the Maritime Session of the International Labour Conference held in Seattle in June 1946.

Medical practitioners and persons engaged exclusively for nursing or hospital duties do not come within the scope of the Act.

Under Section 3 of the Act the Minister of Marine is empowered to make such rules as he deems desirable for ensuring the safety of small vessels not subject to the provisions of the principal Act relating to survey.

The Act does not apply to sailing ships of over 1,000 registered tons or to any vessel which may be exempted by Order-in-Council of the Governor-General. [2]

SOCIAL INSURANCE AND ASSISTANCE

Social Insurance Scheme in Colombia

On 26 December 1946, the Parliament of Colombia adopted an Act to establish a social insurance scheme.[3] Since then a special commission, set up by Presidential Decree of 22 April 1947, has been

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[1] *Diario Oficial* (Uruguay), No. 12012, 31 Oct. 1946.
[2] *New Zealand Gazette*, 27 Feb. 1947.
[3] Act No. 90 of 1946.

requested to draft the preparatory measures for the effective introduction of the scheme. The commission is composed of the Minister of Labour or his representative as chairman, an expert from the I.L.O., representatives of employers' and workers' organisations, and the heads of the appropriate sections of the Ministry of Labour.

Scope of the Act.

All employed persons, including apprentices, home workers and domestic servants, are covered by the new scheme. The obligation to be insured extends also to officials and workers employed in Government, provincial and local services. Independent workers must be insured if their annual earnings do not exceed 1,800 pesos.

Persons who have not been employed for ninety days during the year in work covered by the Act, as well as persons employed in agriculture and seasonal work, and certain classes of persons whose relationship with the employer is defined by the Act, are exempted from the obligation to insure. Such persons, and those who have ceased for any reason to be compulsorily insurable, may insure on a voluntary basis. Voluntary insurance is also open to independent workers whose annual earnings exceed 1,800 but do not exceed 2,400 pesos, or 4,800 pesos if their personal property does not exceed 30,000 pesos.

Risks Covered and Benefits.

The new scheme provides for compulsory insurance against occupational risks (industrial accidents and diseases), and against sickness, maternity, invalidity, old age, and death.

Medical benefits. Any person suffering from an industrial accident or disease is entitled to the necessary medical, surgical and pharmaceutical care, and the provision of all the necessary orthopædic apparatus and other therapeutical treatment required to re-establish his capacity for work.

As regards sickness and maternity, persons affected by sickness are entitled to medical, surgical and pharmaceutical care for a period of 26 weeks. The insurance institution may allow an insured person preventive or convalescent treatment, as well as dental care. If the proper care of the insured person requires the aid of a specialist or a treatment which the insurance institution cannot give, the insured person is entitled to obtain the necessary care within the financial limits laid down by the institution.

In case of confinement, an insured woman is entitled to the necessary medical care.

An insured person's wife and children are entitled to the same medical benefits as the insured.

Cash benefits. The waiting periods attached to cash benefits under the new scheme are determined by the Colombian Social Insurance Institute. This agency will define the rates of benefit due in case of permanent total incapacity caused by industrial accident or disease, the rates of invalidity and old-age pensions, and those of the pensions to be paid to the surviving relatives of pensioners and of insured persons whose death was not due to an occupational risk.

Temporary incapacity. If, owing to an industrial accident or disease, an insured person is affected by temporary incapacity for work, compensation is payable for a period of 180 days, the amount being equal to two thirds of his wages. If, at the end of this period, incapacity still exceeds 5 per cent., the insured person is entitled to a cash benefit depending in amount on the degree of incapacity. The Social Insurance Institute will determine the rate of compensation to be paid to persons so disabled.

Sickness and maternity. A daily allowance is payable to insured sick persons for a period of 180 days. This starts on the fourth day of sickness and is equal to two thirds of wages during the first ninety days and one half of wages for the

remainder. While the insured person is detained in hospital, his family is entitled to an allowance which may not be less than half the compensation to which he would otherwise be entitled.

In case of confinement, an insured woman is entitled to compensation equal to the amount of her wages. This allowance is given for four weeks before and four weeks after confinement provided no paid work is done during these periods. If the mother cannot nurse her child, a nursing allowance is payable for six months.

Permanent incapacity. If permanent incapacity accrues as a result of an industrial accident or disease, the insured person is entitled to a pension. Should the incapacity be partial only, the pension is equal to two thirds of the amount by which the insured person's basic wage is reduced as a result of such incapacity. Persons thus incapacitated who require the constant assistance of another person are entitled to additional benefit.

Invalidity. If incapacity not resulting from industrial accident or disease prevents an insured person from earning a wage equal to one third of that received by a worker in good health in similar conditions, such insured person is entitled to an invalidity pension. This is composed of a basic sum and an increment depending on the number and total amount of the contributions paid by the insured person while he has been insured. If an insured person is affected by invalidity before he has acquired the right to a pension, the Institute may decide to pay him benefits at a reduced rate. An increment to the basic pension is payable if the insured person has children under 14 years dependent on him, or if his wife has reached the age of 60 and has no pension of her own. The Act provides that the amount of the pension may not be less than 15 pesos a month.

Old age. The old-age pension is calculated on the same lines as the invalidity pension. It also may not be less than 15 pesos a month. The pensionable age will be determined in regulations issued by the Institute.

Death. In case of death due to an industrial accident or disease, the surviving relatives of the insured person may receive a pension equal to a proportion of the basic wage previously received by the insured person, namely: widow, 25 per cent., invalid widower or widow, 30 per cent.; full orphan, 25 per cent.; motherless or fatherless child, 15 per cent. A lump sum to cover funeral expenses is paid to the person who undertakes the funeral. If the total of the pensions paid to the widow and children is less than the pension previously received by the deceased insured person or that to which he would have been entitled, the parents or grandparents may claim the difference, provided that this does not exceed 20 per cent. of the deceased person's wages.

If death is due to other reasons than an occupational risk, the surviving relatives are entitled to a pension only if the deceased person had completed the period qualifying for the right to a pension, or was himself in receipt of an invalidity or old-age pension.

The rate of pensions will be fixed by the Institute. The widow, the invalid widower, children under 14, and invalid children above this age may claim payment of survivors' pensions. The parents and grandparents are entitled to a pension if the conditions governing payment to them of survivors' pensions in case of industrial accident or disease are fulfilled. A lump sum is payable to the person who provides the funeral; this may not be greater than the deceased person's wages for one month.

Organisation and Resources.

The Act establishing the new scheme also sets up the Colombian Social Insurance Institute. This is an independent agency responsible for the administration of the scheme. It is required to issue, with the President's approval and in accordance with the Act, general rules concerning the operation of the new scheme; and it will also fix contribution rates and the proportions payable by employers and insured persons, determine the waiting periods in the various branches of the scheme, and organise voluntary insurance.

The Institute is under the supervision of a governing council. A representative of the President will be chairman of this body, which will consist of representatives of the employers and insured persons and of the authorities concerned. Its administrative head will be a Director-General appointed by the President.

Benefits payable under the sickness-maternity and industrial branches of insurance are to be administered by regional funds under the control of the Institute. These will have financial independence. They will act under the supervision of councils composed of representatives of employers, insured persons and the authorities concerned. The director of each regional fund will be elected by the appropriate council. The regional funds may be required to enter a solidarity fund to guarantee financial deficits.

The new scheme is financed by contributions from employers and insured persons, as well as by Government subsidy. The subsidy may not be inferior to half the employer's contribution. Insured persons are classified for the purpose of calculating contributions (and rates of benefit). If an insured person involuntarily becomes responsible for more than four persons, the Government may undertake payment of half his insurance contributions. Contributions on behalf of persons employed by home workers are entirely the latter's responsibility. In the case of independent workers, the Government pays an amount corresponding to what otherwise would be the employer's contribution. Voluntarily insured persons pay their own contributions in full. [1]

Insurance for Industrial Workers in Argentina

Compulsory Pension Insurance Scheme

On 1 September 1946, a Legislative Decree (No. 13937/46) came into force in Argentina, which establishes a scheme of compulsory pension insurance for industrial workers.

The new scheme closely resembles that introduced by Legislative Decree 31665/44 for commercial employees [2], and will likewise be administered by a special section of the National Social Insurance Institute [3], in conjunction with a joint board on which industrial employers and employees are represented.

Scope.

Insurance is compulsory for all persons employed in industrial or related activities and their employers, and for independent workers engaged in such activities, provided that they are not already insured under another scheme of compulsory pension insurance. Persons under the age of 18 are excluded, as are persons engaged in the professions.

Financial Provisions.

The scheme is financed by joint contributions from employees and employers, to which subsidies from the Nation, the provinces and the municipalities may be added.

The joint contribution consists of a permanent portion, destined to cover liabilities in respect of future service in industry, and a temporary portion to be used for amortising liability in respect of service previous to the introduction of the scheme.

The permanent portion comprises three elements :

(a) employee's contribution, equal to 7 per cent. of his wages ;

(b) employer's contribution, equal to 9 per cent. of his wages bill ;

(c) a tax, payable by the employer on his gross sales, equal to 1/8 per cent. of the amount, or, at the employer's option, an additional 3 per cent. of his wages bill.

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[1] *Diario Oficial* (Bogotà), 13 Dec. 1946.
[2] *International Labour Review*, Vol. LI, No. 5, May 1945, p. 661.
[3] *Idem*, Vol. L, No. 6, Dec. 1944, p. 786.

The contribution for amortising liability in respect of previous service comprises :

(d) employee's contribution, equal to 1 per cent. of his wages ;

(e) employer's contribution equal to 2 per cent. of his wages bill.

For their own insurance employers pay all five elements, and independent workers pay all except *(c)*. The basic earnings on which an employer contributes may be fixed by him at between 100 per cent. and 120 per cent. of the wage of his highest-paid employee. Independent workers may fix their basic earnings at 100 pesos a month or any higher amount. Neither employers nor independent workers may increase their basic earnings by more than 10 per cent. per year.

All the elements of the joint contribution except *(c)* are paid monthly by the employer, who must affix a stamp or combination of stamps to the required total amount in the insurance book of the employee ; element *(c)* is paid in cash. The employer is also required to send each month to the competent section of the National Institute his wages list accompanied by the counterfoils of the stamps representing the employees' contributions. Furthermore the employer must supply each employee with a receipt for contributions deducted, on each occasion when wages are paid.

Benefits.

The benefits consist of invalidity, retirement and survivors' pensions, the refund of personal contributions on certain contingencies, and the right to such medical care as is provided under the scheme of preventive and curative medical services which is being developed by the National Institute. [1]

All periods of service in any activity to which the scheme applies and in which the insured person has been engaged since attaining the age of 18 are counted for the purpose of reckoning qualifying periods and rates of pensions.

Periods of service rendered by insured persons before the scheme came into force are equivalent, as to their duration, to periods of service rendered thereafter.

Benefits will be paid, however, only to persons who have actually contributed under the scheme, and, as a rule, no pensions will be paid until five years have elapsed since the scheme came into force. Nevertheless, in the case of contributors who are over the age of 60 when they claim a pension or die, the pension becomes payable when two years have elapsed since the scheme came into force.

Retirement pensions. Retirement pensions at the full rate are payable to insured persons who have 30 years of service (women, 27) and have attained age 55 (women, 50). The figures of 30 and 55 are reduced to 25 and 50 respectively in the case of persons whose service has been rendered in occupations prescribed as unhealthy; when only part of the service pertains to an unhealthy occupation, the reduction is proportionately smaller.

The full retirement pension is also payable with a different combination of length of service and age, according to the rule that an excess of one year of age compensates a defect of two years of service, and an excess of two years of service compensates a defect of one year of age.

A reduced pension may be claimed by a person with 30 years of service (women, 27) who has attained age 50 (women, 45) but not 55 (women, 50), and is reduced by 5 per cent. for each year of defect of age.

A so-called " voluntary pension " may be claimed at age 55 after 10 years of service, the pension in this case being equal to 2.5 per cent. of the insured person's average wage for each year of service. In such cases, an excess of years of age compensates an equal defect of years of service.

The full or reduced retirement pension is based on the average wage earned by the insured person during the previous 15 years. It is subject to a minimum of 70 pesos a month but to no maximum, and is calculated on a scale according to which the proportion of the pension to the average wage decreases as the wage increases, as exemplified below.

[1] *Idem*, Vol. LI, No. 5, May 1945, p. 660.

Average wage (pesos)	Monthly pension (pesos)
100	95
200	185
300	270
...	...
1,000	710
...	...
2,000	1,135
...	...
3,000	1,385
3,100	1,395
3,200	1,405
etc. . .	

Invalidity pensions. Pensions are payable in case of invalidity, whether due to ordinary diseases and accidents or to employment injuries, and whether permanent or temporary, but the incapacity for work must either have lasted, or be likely to last, at least six months.

Two degrees of invalidity are provided for, total and partial. The distinction between the two degrees is not a rigid one, but it is clear that partial invalidity implies the loss of at least one third of the wages previously earned.

In order to qualify for an invalidity pension, unless the invalidity is due to employment injury, 10 years of service must have been completed ; the period is reduced to five years in the case of persons who voluntarily undergo a medical examination before taking up work.

The total invalidity pension is equal to $3^1/_2$ per cent. of the full retirement pension per year of service ; when the invalidity is due to employment injury, the length of service is deemed to be 20 years at least.

The partial invalidity pension is equal to $3^1/_2$ per cent. of the difference between previous earnings and the sum which the partial invalid is earning or deemed able to earn, per year of service.

An invalidity pensioner is required to accept medical treatment and rehabilitation furnished by the National Institute.

Compensation for employment injury, in virtue of Act 9688, is payable in full in conjunction with pensions under the present scheme.

Survivors' pensions. In any case in which an insured person dies at a time when he fulfils the conditions as to length of service and age for the award of any retirement or invalidity pension, or in which a person dies while in receipt of such a pension, his survivors are entitled to a total pension equal to 50 per cent. of that which the deceased was qualified for or was in receipt of. The categories of survivors comprise the widow, incapacitated widower, children (boys under 18, girls under 22), and dependent parents and brothers and sisters.

Refund of contributions. An insured person, with at least one year of service, is entitled to the refund of his contributions of 7 per cent. of his wages, with compound interest at 4 per cent. per annum in the following contingencies :

(i) dismissal, (ii) retirement on marriage (women only), (iii) retirement at age 55 or later, or (iv) invalidity, of a person not entitled to a pension.

In cases (i) and (ii), rights cancelled by the refund can be recovered by a person re-entering insurance if he repays the benefit with added interest.

On the death of an insured person, his survivors, if no survivors' pension is payable, are entitled to the refund of the insured person's contribution of 7 per cent., and the employer's contribution of 9 per cent., of wages, with interest.

Application.

The National Institute is to carry out, before 1 January 1948, a census of persons insured under the scheme, and to establish an actuarial valuation. The competent section is to propose measures to give effect to any changes of benefits and contributions which the valuation may disclose to be necessary.

By 31 October 1946, 41,822 employers and a total of 749,172 insured persons had been registered under the scheme. [1]

[1] *Boletín Oficial*, 1 June 1946 and 16 Aug. 1946 ; INSTITUTO NACIONAL DE PROVISIÓN SOCIAL : *Boletín Mensual*, Oct. 1946.

12TH PAN-AMERICAN SANITARY CONFERENCE

RESOLUTION ON HEALTH AND SOCIAL INSURANCE

The 12th Pan-American Sanitary Conference, held at Caracas, from 12 to 24 January 1947, adopted an important resolution on the relations between public health and social insurance, which is included in the Final Act of the Conference.

The Conference was attended by delegations from all the American republics and by numerous observers, including those appointed by the International Labour Office, the World Health Organisation, Canada and several colonies of the West Indies.

Text of the Resolution.

The 12th Pan-American Sanitary Conference, states the resolution, considers that the creation and development of social security schemes should be encouraged because they help to implement the right of every citizen to the preservation of health, the treatment of illness, and the means of recuperation, and because they provide financial and other economic compensation at times of greatest need. The insured person's own contribution confirms this right.

The insurance recommended constitutes a transition towards a different, universal system which would give the best service to the individual, without making distinctions of any kind. Besides being compulsory, social insurance should be as wide as possible, so as to include large sections of the population and stop the establishment of privileges and artificial divisions within families and groups.

If its action is to be really effective and contribute to the improvement of public health, insurance should operate in accordance with the principles of preventive medicine—that is, it should consider the cause of the disease, the manner in which it spreads, if it is transmissible, and the social or emotional factors which condition or aggravate it. Social insurance with a merely curative object satisfies a temporary need but has no pronounced effect on disease and death rates.

The money which a social insurance scheme receives and accumulates is intended to benefit present contributors, and there is consequently no justification for transferring it to the hypothetical credit of future generations or other groups of persons. When such money is used to finance wider schemes, the State should contribute at least the equivalent of the extra expense involved, so that the original contributors suffer no loss; and when it is used to carry out plans reasonably conceived and carried out, benefit should not be curtailed for the sake of balancing the budget or protecting actuarial reserves with exaggerated care. It is known that inadequate benefits have an unfavourable effect on reserves, whereas the adequate performance of the function of insurance will reduce sickness costs and the future charges for which the reserves are intended. The State should always be prepared to give the necessary financial backing.

Provided sound administrative standards are observed, the structure of the services may differ from one country to another according to political or other circumstances. Whatever method is used should conform to a national scheme integrating the functions of health protection, health promotion and medical aid. Furthermore, dismemberment of the family, forced segregation of related problems, and overlapping should be avoided. Medical men should participate actively and decisively in directing the services and formulating their policy. Until it is possible to reach unity—an ideal which is pursued by different paths in different countries—it appears advisable to establish committees linking the various departments and co-ordinating their work.

Whatever future developments may be, the 12th Pan-American Sanitary Conference considers that health units, through which complete care can be given to groups of the population, are of proved utility. Each such group concentrates the available resources and uses them in the application of a plan suited to the characteristics and requirements of the respective group, which the medical staff

comes to know and with which permanent contact can be established. Such a unit should be directed by a full-time public health expert, assisted by general practitioners, various specialists, and a sufficiently large number of nurses.

Convinced that modern techniques of preventive medicine can considerably improve public health, the 12th Pan-American Sanitary Conference recommends that they be applied and warns that they are costly. Governments should therefore allot to this purpose funds which have a due relation to requirements, do not lead to a still further decline in the economic situation of members of the medical profession, and above all will not unduly affect any national programme which has been planned or is in course of execution.[1]

LIVING CONDITIONS

Workers' Travel Association in France

It will be remembered that a Workers' Travel Association *(Tourisme et Travail)* was set up in France in 1945 to organise holiday and other spare time activities for workers and their families.[1] Some details of the growth and work of the Association are given below.

Membership of the Association has increased from less than 1,000 to nearly 600,000 in the last two years. The majority of members are salaried employees, including employees of the State and of local authorities, about one quarter are manual workers, and one quarter students and apprentices. The regional organisation of the Association, which two years ago was rudimentary, now covers the whole of France, and the movement has been extended to Algeria, Morocco, Senegal, Tunisia, the French Cameroons and the territory occupied by French troops in Germany and Austria.

The cultural or pre-travel section of the Association has increased its activities and there has been close collaboration with other specialised organisations and more particularly with *Travail et Culture*. Circulating libraries have been organised and experiments are being made with travelling film shows. Many thousands of members of the organisation have taken part in the week-end excursions, have followed the language classes and other instruction courses, and have been present at the plays, concerts, films, lectures, etc., which have been organised by the Association.

The travel section of the Association has also undertaken a considerable amount of work. In 1946, 25,000 members benefited from the travel facilities made available, and members from all parts of France have travelled at reduced rates in groups arranged by the Association. In addition, large numbers of young people have been able to enjoy mountaineering in the camps organised in collaboration with the National Union of Mountain Camps *(Union nationale des camps de montagne)* and have taken advantage of the youth hostels, which are open to members of the Workers' Travel Association through collaboration with the French Union of Youth Hostels. Nearly a thousand children have been received in 9 holiday camps, which are intended more particularly for the children of miners in the Nord and Pas-de-Calais areas, and 12 rest centres have been set apart for members of the Association in the Black Forest and the Tyrol. In 1946, 3,600 rooms, distributed over 200 hotels in France, were made available to members of the Association ; a system of prices is being put into practice whereby lower rates are charged

[1] Cf. *International Labour Review*, Vol. LIII, Nos. 1-2, Jan.-Feb. 1946, p. 113.

for transport and accommodation during the periods before and after the full season begins and ends, thus extending the period during which the hotels are occupied and encouraging the staggering of holidays.

Reciprocal Arrangements with Organisations in Other Countries.

Travel is also being arranged to an increasing extent from France to foreign countries. Reciprocal agreements have been reached with sister organisations in other countries, such as the Workers' Travel Association in Great Britain, *Popularis* in Switzerland, *Algemeene Nederlandsche Reisvereeniging* in the Netherlands, *Folke Ferie* in Denmark [1], *Reso* in Sweden [2], *Kansan Matkatoimisto* in Finland, *Folke Ferie* in Norway, and a workers' sport and travel association in Roumania. Exchanges of workers on holiday have already been made between many of these countries and are planned to take place regularly. Negotiations are also being undertaken with organisations in Czechoslovakia, Italy, the U.S.S.R. and Yugoslavia. The principle of reciprocity is adhered to in all agreements of this kind signed by the French Workers' Travel Association. In principle, for each French worker who crosses the frontier under the auspices of the Workers' Travel Association, a national of a foreign country is received in France. [3]

WORKERS' ORGANISATIONS

Conference of Chinese Seafarers

The National Seamen's Union of China, which was originally founded in 1920, held its first General Conference in December 1946. It was attended by 70 representatives from branch associations in China and abroad, and several hundred members. The chairman of the Conference was General Yang Hu. Some of the more important demands included in the resolutions of the Conference are listed below :

Conditions of Work.

(1) The wages of seafarers engaged in home trade should be adjusted to take account of the cost of living in the ports concerned, and the conditions of employment of seafarers serving abroad should be those laid down in international agreements.

(2) Hours of work and manning scales should be fixed.

(3) Contract labour should be abolished.

(4) Employment and dismissal agreements should be concluded with various shipping companies.

(5) The Ministry of Communications should be asked to instruct the shipping authorities to protect the employment of seafarers by restricting the issue of licences.

(6) The scope of the maritime unions should be defined and membership of a union made compulsory.

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[1] Cf. *International Labour Review*, Vol. LIII, Nos. 5-6, May-June, 1946, p. 429 ; and *Industrial and Labour Information*, Vol. LXIX, No. 3, 16 Jan. 1939, p. 81.

[2] *Idem*, Vol. LXII, No. 2, 12 Apr. 1937, p. 143.

[3] *Tourisme et Travail*, No. 27, Jan. 1947 ; *La Tribune des Nations*, No. 74, 21 Mar. 1947.

Welfare.

(1) Schools or supplementary classes for the children of seafarers should be established by different branches of the Seamen's Union.

(2) The Union should establish training classes for seafarers.

(3) The various branches of the Union should raise funds for the promotion of welfare.

(4) The Government should be requested to provide unemployment relief for seafarers.

(5) A monthly magazine for seafarers should be published.

Membership.

The National Chinese Seamen's Union now has a total membership of 141,189, of whom 33,000 are in Shanghai, 13,000 in Canton, and over 10,000 in various foreign ports. [1]

NEWS IN BRIEF

The *Hyderabad* Government is considering the expansion of its medical services. It plans to provide four new hospitals in the capital and a number of 300-bed regional hospitals and 50-bed district hospitals in rural areas. In order to encourage indigenous medical systems it is discussing the establishment of a network of dispensaries. A Public Health Institute is to be set up for the training of auxiliary personnel, prevention of epidemics, maternity and child welfare and the improvement of district health organisations.

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[1] Communication from the I.L.O. Correspondent in Shanghai.

STATISTICS

Unemployment, Employment and Hours of Work

In accordance with the plan which has been adopted for publication at quarterly intervals in the *Review* of statistics on labour conditions in different countries, the statistics of *unemployment*, *employment* and *hours of work* are given in this issue.

The tables show statistics of:

I. Unemployment in general;

II. Employment in general: indices of numbers employed;

III. Industrial employment: *(a)* indices of numbers employed; *(b)* indices of total hours worked;

IV. Hours of work in industry: *(a)* hours actually worked per worker; *(b)* percentage distribution of workers by hours worked.

Figures for the different industries or occupations covered by these series are given in the *Year Book of Labour Statistics*, 1943-44 (tables VI, VIII and XI).

For further information on the scope and method of these statistics, see the January-February 1947 issue of the *Review*: "Statistics, Explanatory Notes", pp. 157-167.

For other topics in labour statistics, see the March-April number for statistics of cost of living and food prices, to appear next in the July issue; and the May number for statistics of wage rates and earnings, to appear next in the August issue.

Explanation of Signs Used in the Tables

The sign . signifies: "figures do not exist".

The sign ... signifies: "figures not yet received".

The sign * signifies: "provisional figures".

The sign — signifies: "figures are nil or negligible".

The sign r signifies: "figure revised since the previous issue".

The sign e signifies: "economic group represented by a few branches only".

The sign —— between two figures of a series signifies that the former series has been replaced by another, or revised.

Figures in *thick-faced type*: indices (**100**) of the base year.

Figures in *italics*: index numbers with a year other than 1937 as base.

Figures within *brackets*: series subject to certain reservations.

Date	Africa	America							
	Nigeria[8]	Canada					United States		Chile
	V	VI		I		V	VI		V
	Applicants for work registered	Unemployed (estimated)		Unemployed (insured)		Applicants for work registered	Unemployed (estimated)		Applicants for work registered
			%		%			%	
1929	.	107 000	4.2	.	.	14 996	1 499 000[6]	3.1[6]	.
1931	.	442 000	17.4	.	.	69 719	7 911 000	16.1	29 345
1933	.	646 000	26.5	.	.	81 809	12 634 000	25.2	71 805
1935	.	483 000	19.0	.	.	84 050	10 208 000	19.9	10 673
1937	.	337 000	12.5	.	.	88 516	7 273 000	13.8	3 203
1938	.	407 000	15.1	.	.	105 236	9 910 000	18.7	4 578
1939	.	386 000[1]	14.1[1]	.	.	103 739	8 842 000	16.5	9 416
1940	.	281 700[2]	10.1[2]	.	.	100 417	7 300 000[6]	13.5[6]	8 551
1941	.	370 000[17]	8.0[17]	.	.	53 663	5 010 000	9.3	4 117
1942	.	238 000[17]	5.3[17]	.	.	65 667	2 380 000	4.4	2 523
1943	2 241[11]	99 000[17]	2.2[17]	.	.	73 677	1 070 000	2.0	3 620
1944	7 259	82 000[17]	1.8[17]	10 454	0.5	64 929	840 000	1.6	4 357
1945	7 562	172 000[3 4]	3.8[3 4]	41 139	1.9	108 331	855 000[7]	1.6[7]	4 626
1946	7 264	142 750[4]	3.0[4]	96 760	4.5	190 685	2 272 500	4.0	4 400
1946 : April	7 611	.	.	123 950	5.8	242 780	2 330 000	4.1	5 031
May	9 349	126 000[4]	2.6[4]	98 810	4.6	211 029	2 310 000	4.0	4 974
June	9 262	.	.	82 382	3.9	179 281	2 570 000	4.4	5 002
July	8 225	.	.	68 535	3.2	160 262	2 270 000	3.8	4 452
Aug.	7 615	117 000[4]	2.4[4]	61 822	2.9	144 619	2 060 000	3.4	4 142
Sept.	6 962	.	.	57 682	2.7	142 200	2 070 000	3.5	4 076
Oct.	7 224	.	.	57 036	2.7	134 126	1 960 000	3.3	4 275
Nov.	7 288	115 000[4]	2.4[4]	63 760	3.0	146 625	1 930 000	3.3	4 253
Dec.	6 868	.	.	84 374	4.0	164 262	2 120 000	3.6	4 251
1947 : Jan.	7 346	.	.	103 995	4.9	193 636	2 400 000	4.2	5 387
Feb.	...	141 000[4]	3.0[4]	110 062	5.2	194 766	2 490 000	4.3	5 781
Mar.	...	.	.	103 291	4.8	...	2 330 000[16]	4.0[16]	...
Persons cov. (thousands)	.	4 795		2 132		.	58 430		.

	America (concl.)	Asia				
	Mexico	Netherlands Indies	Japan		Palestine	
	VI	V	VI		V [13]	
	Unemployed (estimated)	Applicants for work registered	Unemployed (estimated)		Unemployed	
					Wholly[13]	Partially
				%		
1929	.	.	.	.	.	.
1931	287 462	6 912	422 755	6.1	.	.
1933	275 774	14 571	408 710	5.6	.	.
1935	191 371	17 398	356 044	4.6	.	.
1937	180 128	22 978[9]	295 443	3.7	.	.
1938	209 332	18 842	237 371	3.0	.	.
1939	198 593	19 466	212 000*	.	9 361[14]	11 684[14]
1940	184 274	18 603	.	.	10 815	13 976
1941	180 583	15 636[10]	.	.	5 495	9 882
1942	158 076	...	.	.	1 401	4 514
1943	...	...	.	.	358[15]	3 233[15]
1944	...	...	.	.	477	3 822
1945	...	...	3 336 750[11]	11.8[11]	382	4 035
1946	...	...	...	...	608	5 985
1946 : April	...	...	5 600 000	18.9	304	4 815
May	...	...	...	...	532	6 163
June	...	...	...	...	510	6 054
July	...	...	...	...	592	7 106
Aug.	...	...	...	...	703	7 246
Sept.	...	...	...	...	603	6 324
Oct.	...	...	...	...	730	5 570
Nov.	...	...	...	...	606	5 666
Dec.	...	...	...	...	723	5 973
1947 : Jan.	...	...	...	...	901	7 718
Feb.	...	...	...	...	622	7 626
Mar.	...	...	...	...	585	9 019
Persons cov. (thousands)	.	.	28 270		60	

I. Compulsory unemployment insurance statistics.
II. Voluntary unemployment insurance statistics.
III. Trade union fund returns.
IV. Trade union returns.
V. Employment exchange statistics.
VI. Official estimates.

[1] Since Sept. 1939, including previously unemployed wage earners who enlisted. [2] Jan.-Oct. [3] Nov. [4] Based on sample survey. [5] Bureau of Labor Statistics Occupational Outlook Division estimates. [6] Bureau of the Census estimates. [7] Jan.-June. [8] Lagos. [9] Since 1936, including applications for work registered with local correspondents. [10] Jan.-Nov. [11] Dec. [12] Jewish labour only : reported prior to 1943 by unions ; subsequently by joint Jewish labour exchanges. [13] Number of persons registered as unemployed for 20 days or more during the month. [14] Aug.-Dec. [15] April-Dec. [16] April : 2 420 000 ; 4.1 per cent. [17] June.

Date	Europe						
	Germany		Austria	Belgium		Bulgaria
	V		V	II [6]	V	V
	Unemployed (registered)		Unemployed (registered)	Unemployed [6] (insured)	Applicants for work registered	Unemployed (registered)
		%				
1929	1 898 604	9.3	192 062	13 000 [7]	.	.
1931	4 519 704	23.3	300 223	110 000 [7]	.	.
1933	4 804 428	26.3	405 740	210 000 [7]	.	.
1935	2 151 039 [1]	11.6 [1]	348 675	210 927	.	.
1937	912 312	4.6	320 961	125 929	.	.
1938	429 461	2.1	244 788 [3]	173 913	.	.
1939	.	.	89 183 [3]	195 211	.	31 438
1940	.	.	.	.	.	31 764
1941	.	.	.	.	.	31 057
1942	.	.	.	.	.	26 453
1943	.	.	.	.	.	25 073
1944	.	.	.	.	.	20 881
1945	.	.	80 000 [4]	144 579	179 347	17 862
1946	...	...	74 049	67 192	68 436	...
1946 : April	1 628 000 [14]	7.1 [14]	78 141 [7]	67 053 [7]	74 153	24 237
May	.	.	80 745 [7]	55 955	61 329	20 901
June	1 412 000	5.5	79 883 [7]	48 952	53 222	6 715
July	.	.	72 420	47 690	46 320	4 520
Aug.	.	.	69 698	49 542 [7]	43 249	2 723
Sept.	1 193 000	4.4	67 300 [7]	36 705 [7]	39 029	2 164
Oct.	.	.	66 398	37 204	40 829	2 706
Nov.	.	.	64 657	43 391	43 641	7 614
Dec.	...	...	61 163	80 742	76 574	...
1947 : Jan.	.	.	68 225	90 241	77 055	...
Feb.	.	.	74 000 [8]	130 979	107 578	...
Mar.	...	...	...	93 649	66 164	23 178
Persons cov. (thousands)	26 919		1 800	.	.	.

Date	Europe (*cont.*)							
	Denmark			Spain	Finland	France		
	III		V	V	V	11	V	
	Unemployed (trade unionists)		Applicants for work registered	Unemployed	Unemployed (registered)	Unemployed (on relief) [12]	Applications for work registered	
		%						
1929	42 817	15.5	44 581	.	3 877	928	10 052	
1931	53 019	17.9	59 430	.	11 495	56 112	75 215	
1933	97 478	28.8	121 115	593 627 [8]	17 139	276 033 [13]	307 844	
1935	76 195	19.7	92 406	696 989	7 163	426 931	465 875	
1937	95 103	21.9	108 634	.	3 695	350 333	379 095	
1938	97 136	21.4	112 050	.	3 602	373 641 [7]	402 186 [7]	
1939	88 924	18.4	102 066	536 520 [10]	3 300	381 902 [7]	418 413 [7]	
1940	119 593	23.9	133 358	474 808	3 955	751 800	961 168	
1941	43 476 [9]	8.0 [9]	48 501 [9]	450 014	3 384	292 649 [7]	394 534 [7]	
1942	48 968	9.1	53 159 [7]	294 530	1 561	70 312 [7]	123 957 [7]	
1943	34 272 [7]	6.3	37 056 [7]	225 493	923	19 878 [7]	41 552	
1944	25 411 [7]	4.6	26 716 [7]	169 492	2 018	14 577 [7]	22 525 [14]	
1945	46 661	8.2	47 623 [7]	148 000 [8]	3 240	15 813 [7]	68 436 [7]	
1946	27 578	4.7	28 257	...	2 936 [8]	15 663	56 633	
1946 : April	25 885	4.4	26 576	185 701	3 696	22 023	66 885	
May	17 448	3.0	18 289	194 683	3 815	19 719	61 087	
June	9 293	1.6	9 848	172 061	2 833	16 243	50 406	
July	6 753	1.2	7 137	163 929	2 259	13 038	41 989	
Aug.	6 338	1.1	6 643	172 420	2 605	11 295	42 495	
Sept.	9 395	1.6	9 698	176 393	2 704	9 891	46 646	
Oct.	10 279	1.8	10 610	...	3 336	9 253	51 437	
Nov.	18 441	3.2	19 046	...	3 405	9 038	50 719	
Dec.	58 421	10.0	59 163	...	2 517	9 532	46 424	
1947 : Jan.	71 966	12.3 [7]	72 845	...	3 939	9 530	45 428	
Feb.	89 910	15.4	91 127	...	4 756	9 550	45 849	
Mar.	70 352	10.0	71 465	...	...	9 466	46 935	
Persons cov. (thousands)	567		.	.	.	.	.	

I. Compulsory unemployment insurance statistics.
II. Voluntary unemployment insurance statistics.
III. Trade union fund returns.
IV. Trade union returns.
V. Employment exchange statistics.
VI. Official estimates.

[1] Since July 1933, not including persons employed in labour camps; since Mar. 1935, including the Saar Territory. [2] Before April 1938, applicants for work registered. [3] Jan.-July. [4] Dec. [5] Since Oct. 1944, compulsory unemployment insurance statistics. [6] Daily average during the month. [7] Estimates. [8] New series; June-Dec. [9] July-Dec. [10] Sept.-Dec. [11] Public relief fund statistics. [12] Since Jan. 1937, the figures relate to the last week entirely included in the month. [13] From July 1932 onwards, including unemployed in receipt of relief from the welfare offices. [14] First three months. [15] Labour registration statistics; present territory.

Date	Europe *(cont.)*						
	Great Britain		Hungary	Ireland			Italy
	V		V	I		V	[16]
	Applicants for work registered		Applications for work registered	Unemployed (insured)		Applicants for work registered	Wholly unemployed
	Wholly[1]	Tempor.			%		
1929	959 213	264 911	15 173	.	.	20 702	300 786
1931	2 061 861	579 851	52 305[4]	.	.	25 230	734 454
1933	2 045 670	450 570	60 595	.	.	72 472[9]	1 018 955[16]
1935	1 683 887	306 228	52 048	.	.	119 498	749 444[16]
1937	1 255 283[5]	200 876	48 359	.	.	82 425	.
1938	1 404 376	371 956	47 426	.	.	88 714	.
1939	1 192 199	215 759	48 348	55 165	15.6	93 074	.
1940	689 473[5]	160 615	43 684	54 677	15.5	84 054	.
1941	203 029	59 403	48 892	50 967	14.6	74 656	.
1942	93 762[6]	6 003	35 996	48 846	14.2	76 887	.
1943	67 765	1 528	25 929[6]	41 194	12.5	66 884[9]	.
1944	62 697	912	...	36 263	11.3	59 047	.
1945	139 000	1 133	...	33 964[7]	10.6[7]	58 999	1 325 000[16]
1946	359 754	3 315	43 361	35 067	10.6	59 726	1 654 872
1946 : April	369 836	1 574	43 883	38 054	11.9	68 457	1 467 678
May	373 587	1 289	36 882	35 690	10.7	61 915	1 546 100
June	371 583	4 584	28 300	32 992	9.9	46 244	1 531 402
July	355 165	4 169	25 308	31 867	9.6	44 475	1 683 077
Aug.	358 957	4 764	45 918	33 549	10.1	45 792	1 769 765
Sept.	355 285	3 921	57 353	31 202	9.4	43 807	1 857 934
Oct.	361 788	3 870	72 120	29 673	8.9	43 988	1 946 026
Nov.	361 817	4 714	70 012	32 041	9.6	63 335	1 997 601
Dec.	358 645	4 331	59 631	32 940	9.9	64 787	2 098 257
1947 : Jan.	392 171	9 078	78 906	36 025	10.8	69 515	2 227 866
Feb.	460 183	1 413 878	84 598	38 235	11.5	73 279	...
Mar.	450 195	314 653	105 141	44 477[21]	13.4[21]	75 213[22]	...
Persons cov. (thousands)	.	.	.	333		.	.

Date	Europe *(cont.)*						
	Norway			Netherlands	Poland [15]		Portugal
	III	V		V	V		V
	Unemployed (trade unionists)		Unemployed (registered)	Wholly unemployed	Applications for work registered		Unemployed (registered)
		%				%	
1929	5 902	15.4	19 089	.	129 450	4.9	.
1931	.	22.3	28 027	138 231	299 502	12.6	.
1933	16 588	33.4	36 703	322 951	249 660	11.9	25 255
1935	14 783	25.3	36 776	384 691	381 935	16.7[17]	42 315
1937	16 532	20.0	29 881	368 909	375 088	14.6	40 240
1938	19 230	22.0	30 296	353 646	347 509	12.7	.
1939	16 789	18.3	28 251	253 261[13]	414 584[16]	14.1[16]	.
1940	...	23.1	29 099[11]	197 886	.	.	.
1941	...	11.4	19 181	117 814	.	.	13 626[13]
1942	.	.	4 747	74 600	.	.	10 185[13]
1943	.	.	437	20 364	.	.	7 172
1944	.	.	259	.	.	.	4 229
1945	...	5.3[10]	9 172[13]	97 460*[14]	.	.	3 107
1946	...	...	12 246	53 079	.	.	...
1946 : April	...	...	17 786	59 035	.	.	2 532
May	...	...	11 419	52 040	.	.	.
June	...	...	6 521	45 953	.	.	2 459
July	...	...	4 236	39 918	.	.	.
Aug.	...	...	4 397	40 610	.	.	...
Sept.	...	...	5 329	38 743	.	.	.
Oct.	...	...	6 489	37 578	.	.	...
Nov.	...	...	8 746	39 040	.	.	.
Dec.	...	...	10 284	47 007	.	.	...
1947 : Jan.	...	...	13 825	51 480	.	.	.
Feb.	...	...	15 325	55 794	.	.	...
Mar.	...	...	...	48 300	.	.	.
Persons cov. (thousands)	95*		530[7]	.	2 978		.

I. Compulsory unemployment insurance statistics.
II. Voluntary unemployment insurance statistics.
III. Trade union fund returns.
IV. Trade union returns.
V. Employment exchange statistics.
VI. Official estimates.

[1] Including casuals. [2] Including agriculture. [3] Since July 1940, excluding men in attendance at Government training centres who were unemployed when they entered the centres. [4] Since Mar. 1942, excluding men classified as unsuitable for ordinary industrial employment and women unsuitable for normal full-time employment. [5] Since Jan. 1930, excluding non-fee-charging private employment agencies. [6] Jan.-Nov. [7] Since July 1945, excluding discharged soldiers who have qualified for unemployment benefits. [8] Extended series. [9] Since Jan. 1943, middle of month. [10] Up to July 1933, social insurance fund statistics; since July 1933, employment exchange statistics. [11] Since Jan. 1940, end of the month; including persons employed on public works. [12] Since Jan. 1945, excluding Finnmark and evacuated communes in Troms. [13] Since April 1939, excluding persons employed on special relief works. [14] June-Dec. [15] Since Jan. 1939, including the territory of Silesia beyond the Olza. [16] Jan.-June. [17] Since 1935, percentage based on the number of persons covered by compulsory social insurance schemes. [19] Dec. [19] Jan.-Oct. [20] July-Dec. [21] April: 40 090; 12.0 per cent. [22] April: 68 192.

Date	Europe *(cont.)*						
	Rumania	Sweden			Switzerland		
	V	IV		V[3]	I/II[3]		V
	Unemployed (registered)	Unemployed (trade unionists)		Applications for relief	Unemployed (insured)		Applications for work
					Wholly	Partially	
			%		%	%	
1929	7 449	32 621	10.2	10 212	1.8	1.7	8 131
1931	35 737	64 815	16.7	46 540	5.9	12.1	24 208
1933	29 060	97 316	23.4	164 773	10.8	8.5	67 867
1935	13 778	81 385	15.1	61 581	11.8	5.9	82 468
1937	10 851	67 351	10.8	18 213	10.0	2.5	71 130
1938	7 271	74 582	10.9	16 189	8.6	4.5	65 583
1939	5 989	71 467[4]	9.2[5]	17 556	6.5	2.9	40 324
1940	3 192	99 201	11.8	13 367	3.1	2.1	16 374
1941	861	85 018	11.3	22 219	2.0	1.7	10 550
1942	6 067[1]	56 938	7.5	12 306	1.9	2.0	10 675
1943	6 071	43 950	5.7	7 081	1.4	1.5	7 846
1944	4 282	38 877	4.9	11 255	1.6	1.7	8 380
1945	5 525	36 195	4.5	8 761	1.6	1.0	8 107
1946	6 642	27 472[6]	3.2[6]	4 833	1.0	0.3	5 479
1946 : April	4 891	27 041	3.2	6 534	0.4	0.3	2 791
May	9 366	18 860	2.2	4 594	0.3	0.2	2 261
June	8 977	17 655	2.1	3 487	0.3	0.3	2 083
July	7 343	18 326	2.2	2 704	0.2	0.2	1 564
Aug.	7 086	17 521	2.1	2 308	0.2	0.1	1 725
Sept.	6 344	17 079	2.0	2 430	0.2	0.1	1 726
Oct.	7 671	18 367	2.2	2 782	0.1	0.1	2 034
Nov.	6 203	23 504	2.8	3 557	0.3	0.2	2 605
Dec.	5 883	41 985[6]	4.9[6]	4 084	2.5	0.6	11 126
1947 : Jan.	...	34 650	4.2	5 035	3.4	0.8	15 411
Feb.	...	41 714	4.9	5 279	3.1	0.6	13 847
Mar.	...	...	...	4 829	0.8	0.4	2 861
Persons cov. (thousands)	.	814		173[4]	542[7]		.

Date	Europe *(concl.)*		Oceania			
	Czechoslovakia	Yugoslavia	Australia		New Zealand	
	V	V	IV		V	V
	Applicants for work	Unemployed (registered)	Unemployed (trade unionists)		Unemployed	Unemployed (registered)
				%		
1929	41 630	8 370	47 359	11.1	2 895[13]	.
1931	291 332	9 930	117 866	27.4	41 431[13]	.
1933	738 267	15 997	104 035	25.1	46 944	.
1935	686 269	16 752	71 823	16.5	38 234	.
1937	408 949	21 650	41 823	9.3	.	.
1938	335 518[8]	22 517	40 138	8.7	4 757[13]	.
1939	41 317[7]	24 223	45 967	9.7	6 422[14]	.
1940	17 629	26 724	39 116	8.0	4 352	.
1941	13 622	14 622[10]	20 013	3.7	2 023	.
1942	10 367[8]	4 758[11]	9 754	1.6	810	.
1943	.	...	7 545	1.1	405	.
1944	.	...	8 073	1.2	327	.
1945	18 722[9]	...	7 864	1.2	278	479[14]
1946	24 113	...	9 125	1.4	170[6]	386
1946 : April	24 510	...	.	.	190	487
May	24 503	...	8 757	1.3	200[6]	514
June	23 124	...	.	.	183	593
July	22 782	...	.	.	202	506
Aug.	24 895	...	9 212	1.4	197	414
Sept.	26 233	...	.	.	154	268
Oct.	24 648	...	.	.	100	214
Nov.	23 049	...	9 468	1.4	71	155
Dec.	20 082	...	.	.	91	120
1947 : Jan.	26 366	...	.	.	72	99
Feb.	25 143	...	9 880	1.4	43	108
Mar.	...	...	.	.	35	74
Persons cov. (thousands)	.	.	672[7]		1 100	.

I. Compulsory unemployment insurance statistics.
II. Voluntary unemployment insurance statistics.
III. Trade union fund returns.
IV. Trade union returns.
V. Employment exchange statistics.
VI. Official estimates.

[1] Since 1942, applications for work. [2] Since Jan. 1939, including agricultural workers. [3] Local unemployment committees. [4] Number of relief funds (Dec. 1946, units). [5] Compulsory insurance in certain cantons, voluntary in others. [6] Jan.-Aug. [7] Data for the years 1939 to 1942 refer to Bohemia, Moravia and Silesia excluding Borderland. [8] Jan.-Oct. [9] Nov. and Dec. [10] Since 1941, Croatia. [11] Jan.-June. [12] Up to 1932, numbers of unemployed (males) remaining on registers of Government labour bureaux. [13] Excluding persons totally unfit for employment for health or other reasons (approx. 8 000 at the end of 1937). [14] Since April 1939, number of unemployment benefits in force. [15] Dec.

TABLE II. STATISTICS OF EMPLOYMENT IN GENERAL[1]

Indices of numbers employed (1937 = 100)

Date	Africa		America					
	Union of South Africa		Canada	United States		Argentina (Buenos Aires)	Colombia (Central Zone)	Peru
	Europeans	Total		B.L.S.[3]	B.C.[3]			
	III (A/B)		III (A)	IV	IV	III (A)	III (B)	III (B)
	M.I.T.[2]		M.I.T.C.[2]	M.I.T.C.	A.M.I.T.C.	I.T.C.	M.I.T.[2]	A.M.I.
	W.S.		W.S.	W.S.	W.S.	W.	W.	W.
1929	68.4	69.3	104.3	101.7	.	79.3	.	.
1935	84.3	84.5	87.1	86.9	.	89.8	.	.
1936	92.7	94.1	90.9	94.1	.	94.8	.	.
1937	**100.0**	**100.0**	**100.0**	**100.0**	.	**100.0**	.	.
1938	103.7	104.9	98.0	93.7	.	102.7	**100.0**[7]	.
1939	105.5	105.8	99.8	98.9[7]	.	104.8	*94.2*	**100.0**
1940	106.4	111.3	108.9	104.6[7]	**100.0**[4]	102.5	*84.6*	*108.0*
1941	110.1	117.6	133.5	118.1[7]	*104.8*[7]	107.1	*85.5*	*105.4*
1942	111.9	120.3	152.2	129.6[7]	*111.9*[7]	111.5	*95.2*	*95.6*
1943	112.6	116.0	161.3	137.3[7]	*113.4*[7]	116.6	*101.9*	*88.0*
1944	113.5	117.1	160.4	135.4[7]	*112.3*[7]	123.1	*123.9*	*83.7*
1945	116.1	121.2	153.5	130.5[7]	*109.2*[7]	123.0	...	...
1946	121.8	124.5	151.8	132.9	*115.0*[7]	...	...	...
1946 : April	121.2	125.1	148.4	130.3[7]	*112.6*[7]	.	...	.
May	121.6	125.3	148.9	131.4[7]	*114.2*[7]	.	...	.
June	121.9	125.7	152.1	132.8[7]	*117.3*[7]	.	...	.
July	122.3	125.5	151.4	133.5[7]	*120.4*[7]	.	...	.
Aug.	122.8	125.4	153.8	135.4[7]	*120.1*[7]	.	...	.
Sept.	123.3	125.4	156.1	136.6[7]	*118.7*[7]	.	...	.
Oct.	123.4	125.2	160.1	137.3	*118.7*[7]	.	...	.
Nov.	123.7	124.7	162.8	138.6	*118.7*[7]	.	...	.
Dec.	123.4	124.1	158.6[7]	140.2	*117.2*[7]	.	...	.
1947 : Jan.	123.6	122.8	158.4	136.7	*115.3*[7]	.	...	.
Feb.	122.7	126.3	158.6[8]	137.3[8]	*115.6*[7]	.	...	.
Mar.	...	...	...	...	*116.7*[19]	.	...	.
Persons cov. (thousands)	.../236[7]	.../929[7]	1 858[7]	42 928[7]	56 310[7]	.	13	178

Date	Asia		Europe						
	Japan	Palestine	Germany[9]	Austria	France	Great Britain[12]	Hungary	Ireland	Luxembourg
	IV	III (B)	I	I	III (A)	II	I	I	III (A)
	M.I.T.	I.T.[6]	A.M.I.T.C.	A.M.I.T.C.	M.I.T.[2]C.[2]	M.I.T.[2]C.[2]	M.I.T.C.[2]	A.M.I.T.C.	M.I.T.
	W.	W.S.	W.S.	W.S.	W.S.	W.S.	W.S.	W.S.	W.S.
1929	76.2	.	95.9	148.4	.	88.7	96.2	.	133.5
1935	92.7	.	86.9[9]	99.1	93.5	90.0	87.7	92.6	89.2
1936	94.4	.	93.2	95.8	94.3	94.6	93.9	96.2	91.9
1937	**100.0**	.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
1938	105.0	**100.0**[7]	106.3	.	103.3	97.5	106.3	100.2	101.7
1939	.	*85.8*	111.7[10]	.	106.1[10]	102.7	114.2	100.5	99.2
1940	.	*97.4*	.	.	.	102.1	120.8	97.8	92.5[17]
1941	.	*110.0*	.	.	90.8	103.6	151.3[14]	96.9	.
1942	.	*127.2*	.	.	96.1	106.2	164.4[14]	96.2	.
1943	.	*139.9*	.	.	91.0	103.3	170.6[14]	95.7	.
1944	.	*136.3*	.	.	91.1	100.0	...	97.8	.
1945	.	*135.8*	.	.	92.2	95.8	...	100.5	.
1946	.	...	...	130.2	...	95.7[13]	...	...	88.3[18]
1946 : April	.	*130.8*[7]	**100.0**[11]	123.3[7]	98.2	93.3[7]	...	.	.
May	.	*132.9*[7]	.	127.4[7]	.	94.5[7]	...	.	.
June	.	*131.6*[7]	*105.7*	130.5[7]	.	95.2[7]	...	.	.
July	.	*132.9*[7]	.	134.4[7]	...	95.1	...	.	84.5
Aug.	.	*134.8*[7]	.	137.5[7]	.	97.9[7]	...	.	86.1
Sept.	.	*139.9*[7]	*113.1*	139.4	.	98.6	...	.	88.5
Oct.	.	...	.	140.6	...	99.3[7]	...	.	88.9
Nov.	.	...	.	140.9	.	100.1	...	.	90.8
Dec.	.	...	...	138.6	.	100.1	...	.	90.5
1947 : Jan.	.	...	.	136.6	...	100.8	...	.	89.9
Feb.	.	...	.	...	.	.[20]	...	.	89.5
Mar.	.	...	...	...	.	...	...	.	88.8
Persons cov. (thousands)	13 360[7]	53[7]	16 736	1 827[7]	2 403	12 023[7]	1 748	623[8]	31

I. Compulsory social insurance statistics (sickness, accidents, etc.). II. Compulsory unemployment insurance statistics. III. Statistics of establishments: III (A). All establishments of a given importance; III (B). Representative sample of establishments; III (A/B). Type B series (for the recent period) linked to a type A series. IV. Estimates. A. Agriculture. M. Mines. I. Industries. T. Transport. C. Communications. W. Wage earners. S. Salaried employees.

[1] For notes on the compilation of this table, see *International Labour Review*, Vol. LV, Nos. 3-4, p. 329. [2] Bureau of Labor Statistics. [3] Bureau of the Census. [4] Mar.-Dec. [5] May. [6] Prior to 1943, private manufacturing, including chemical extracting industry; from 1943, including also building, transport, and Government undertakings. [7] Jan. [8] Old territory. [9] Since Nov. 1935, including the Saar territory. [10] Jan.-July. [11] Estimates of employed persons based on labour registration; present territory. [12] And Northern Ireland; annual figures June of each year, except 1946, which is an average. [13] Since Jan. 1946, new series based on July 1939 and spliced to old series. [14] Since Jan., including Northern territories and Subcarpathia; since May, Transylvania. [15] Since Mar., including the Southern territories. [16] Jan.-Nov. [17] Jan.-April. [18] July-Dec. [19] April: *118.0*. [20] Not compiled owing to dislocation of industry due to fuel and bad weather crisis.

TABLE II. STATISTICS OF EMPLOYMENT IN GENERAL *(concl.)*

Indices of numbers employed (1937 = 100)

Date	Europe *(concl.)*							Oceania	
	Norway	Netherlands	Poland	Czechoslovakia[4]		U.S.S.R.	Yugoslavia	Australia[11]	
	III (B)[1]	I	I	I		III (A)	I	III (A)	
	M.I.T.C.[5]	M.I.T.C.[5]	M.I.T.C.	A.M.I.T.C.		A.[6]M.I.T.C[6]	I.T.[5] C.[5]	M.I.T.C.	
	W.S.	W.S.	W.S.	W.[6]	W.S.[6]	W.S.	W.S.	[12] W.S.	[13]
1929	.	109.3	.	111.0	.	45.1	89.0	.	.
1931	.	104.9	.	102.4	.	70.4	89.6	.	.
1933	.	92.9	.	83.6	.	82.7	76.6	*77.0*[13r]	*77.3*[13r]
1935	90.9	92.0	.	85.0	.	91.6	83.0	.	.
1936	93.6	93.0	.	91.4	.	95.5*	90.6	.	.
1937	**100.0**	**100.0**	.	**100.0**	**100.0**	**100.0***	**100.0**	.	.
1938	100.0	104.3	**100.0**	88.6[6]	.	103.0*	105.2	.	.
1939	105.5	108.7	.	57.1	.	...	106.0	**100.0**[14]	**100.0**[14]
1940	102.7	107.2	.	58.6	.	...	108.5[10]	.	.
1941	**100.0**[1]	118.2	.	59.2	.	...	...	*111.7*[14]	*111.7*[14]
1942	*102.3*	114.6	.	58.7	.	...	...	*111.5*[r]	*109.7*
1943	*100.9*	...	.	62.7	.	...	...	*110.6*[r]	*104.1*[r]
1944	*97.6*	...	.	67.4	.	...	...	*110.4*	*103.2*[r]
1945	*84.6*	...	*66.6*[3]	93.6[7]	99.0[8]	...	...	*110.4*	*104.6*
1946	*96.1*	...	*97.3*[3]	93.5	.	...	...	*113.6*	*109.8*
1946 : April	*92.8*	.	*84.1*[r]	96.8[r]	106.1	.	...	*117.8*	*114.8*
May	*95.2*	.	*89.7*	98.5[r]	107.6	.	...	*119.4*	*116.6*
June	*97.8*	.	*94.4*	98.0[r]	107.4	.	...	*120.5*	*117.5*
July	*98.9*	.	*99.2*	95.7[r]	106.0	.	...	*121.8*	*119.1*
Aug.	*100.1*	.	*103.6*	93.0	104.2	.	...	*123.0*	*120.7*
Sept.	*100.9*	.	*106.8*	90.7	103.1	.	...	*124.1*	*121.9*
Oct.	*99.3*	.	*110.1*	89.8	102.6	.	...	*124.9*	*122.8*
Nov.	*98.9*	.	*114.3*	89.4	101.9	.	...	*125.2*	*122.9*
Dec.	*97.1*	.	*116.1*	86.9	100.8	.	...	*125.3*	*122.6*
1947 : Jan.	*96.4*	.	...	...	...	.	...	*126.0*	*123.4*
Feb.	*98.3*	.	...	...	...	.	...	*126.8*	*124.0*
Mar.	...	.	...	...	...	.	...	...	...
Persons cov. (thousands)	520[r]	1 365	2 618[r]	2 059[r]	3 191	27 800*	756	2 168	1 625

TABLE III. STATISTICS OF INDUSTRIAL EMPLOYMENT[17]

(a) *Indices of numbers employed* (1937 = 100)

Date	Africa	America							Asia	
	Union of S. Africa	Canada	United States	Argentina	Chile	Colombia (Bogotá)	Mexico	Uruguay	India (British)	Japan
	III (A/B)[15]	III (A)[15]	III (A/B)[15]	III (B)[20]	III (B)[15]	III (B)	III (B)[21]	III (B)	III (A)	III (A/B)
	W.S.[19]	W.S.	W.	W.	W.	W.	W.[21]	W.	W.	W.[15]
1929	58.5	102.4	97.5	.	.	.	.	.	.	70.0
1937	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	.	**100.0**	.	**100.0**	**100.0**
1938	97.8	97.0	85.1	104.3	105.5	**100.0**[22]	100.7	*112.3*[15]	103.7	110.1[23]
1939	96.4	98.2	94.5	108.5	108.1	*90.0*	100.1	*114.8*	104.5	121.1
1940	94.0	114.7	101.7	111.1	117.0	*80.3*	102.0	*113.7*	110.1	124.8
1941	97.1	147.2	125.0	117.0	127.6	*83.1*	107.2	*119.6*	128.7	127.9
1942	99.8	180.5	145.6	123.6	133.7	*96.7*	113.3	*117.4*	136.2	141.6
1943	95.4	197.7	168.0	126.1	127.0	*105.1*	115.6	*121.8*	145.4	155.4[24]
1944	...	196.2	163.0	131.1	129.7	*135.8*	119.7	*128.7*	150.5*	...
1945	...	178.0	143.5[r]	132.5	131.8	*142.6*	120.1	*134.1*	157.7*	...
1946	...	162.8	134.2	136.9	134.8	...	...	...	...	...
1946 : April	.	162.8	130.9[r]	134.8	130.2	...	.	.	.	...
May	.	161.5[r]	131.9[r]	137.1	131.5	...	...	...	.	...
June	.	163.6	134.1[r]	141.3	131.9	...	.	.	.	...
July	.	161.0[r]	135.8[r]	143.6	131.9	...	.	.	.	...
Aug.	.	163.6	139.6[r]	143.1	133.4	...	...	...	.	...
Sept.	.	164.7	141.3[r]	143.4	133.3	...	.	.	.	...
Oct.	.	168.5	141.4[r]	119.3	134.0	...	.	.	.	...
Nov.	.	169.8	143.7[r]	142.6	134.8	...	...	...	.	...
Dec.	.	166.6	144.4	142.4	136.3	...	.	.	.	...
1947 : Jan.	.	169.5	144.4	142.5	137.0	...	.	.	.	...
Feb.	.	170.0*	145.4	143.4	138.2	...	...	...	.	...
Mar.	.	...	145.6	...	...	...	.	.	.	...
Persons cov. (thousands)	.../55	1 020	12 250/ 7 999	241	23	3*	135	45	2 643	2 995/ 1 510*

[1] Since 1941, unemployment insurance statistics. [2] Nov. and Dec. [3] Feb.-Dec. [4] Since 1937, excluding Ruthenia. [5] Private sector. [6] From Sept. 1938 to Aug. 1945 : Bohemia, Moravia and Silesia (excluding Borderland). [7] Sept.-Dec. [8] Private and public sectors. [9] Sept., Oct. and Dec. [10] Jan.-Nov. [11] Averages of the 12 months ending in June of the year indicated. [12] Total civil employment. [13] June. [14] July. [15] July and Nov. [16] Private civil employment. [17] For notes on the compilation of this table, see *International Labour Review*, Vol. LV, Nos. 3-4, p. 329. [18] Excluding building. [19] Europeans only. [20] Including mining. [21] May. [22] Excluding the crackers and macaroni industries. [23] Statistics of type B, linked up with statistics of type A of the preceding period. [24] Jan.-July. [25] 1936 = 100.

(a) *Indices of numbers employed* (concl.) (1937 = 100)

Date	Asia *(concl.)*	Europe								
	Palestine	Germany[3]	Denmark	Finland	France	Gr. Britain and N. Ireland	Hungary	Ireland	Italy F.C.I.[14]	Norway
	III (B)	III (B)[4]	III (A)[7]	III (B)[7]	III (A)[8]	II[7]	I	III (A/B)	III (A/B)	I
	W.	W.	W.	W.	W.	W.S.[11]	W.	W.S.	W.	W.
1929	.	90.3	.	85.5	.	90.7	96.2	64.4	95.7	.
1937	.	100.0[5]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.
1938	100.0[1]	106.0	100.2	102.9	104.1	94.5	108.0	100.1	105.9	.
1939	*82.3*	110.9[6]	109.4	93.6	105.9[9]	102.5	119.1	101.4	109.3	.
1940	*98.6*	.	101.7	78.7	84.5[10]	107.5	124.5	100.1	116.6	.
1941	*115.1*	.	104.2	112.0	93.1[7]	112.6	133.8	96.3	117.9	100
1942	*136.1*	.	111.0	107.4	98.9[7]	119.1	...	92.7	116.5[16]	*102*
1943	100.0[2]	.	115.9	107.8	93.0[7]	118.4	...	93.3	.	*103*
1944	*104.4*	.	116.8	101.9	92.1[7]	113.3	...	95.5	.	*101*
1945	*108.8*	.	108.7	121.4	93.5	104.2	...	99.3[12]	.	*93*
1946	*102.9*	.	...	128.1	100.5	103.0[13]	...	110.0	.	*110*
1946 : April	*102.5*	.	...	.	100.3[7]	...	...	.	.	*107*
May	*101.9*	.	...	.	.	...	...	.	.	*109*
June	*98.4*	.	...	129.1	.	100.0	...	.	.	*112*
July	*100.3*	.	...	.	101.5	...	...	.	.	*112*
Aug.	*101.0*	.	...	.	.	102.9	...	.	.	*113*
Sept.	*104.5*	.	...	129.4	.	103.8	...	112.3	.	*114*
Oct.	*106.0*	.	...	.	103.9	104.8	...	.	.	*115*
Nov.	*98.0*	.	...	.	.	105.7	...	.	.	*116*
Dec.	*108.0*	.	...	129.2	.	105.7	...	.	.	*116*
1947 : Jan.	*94.0*	.	...	.	105.9	106.9	...	.	.	...
Feb.	...	.	...	.	.	.[15]	...	.	.	...
Mar.	...	.	...	...	.	...	...	...	.	...
Persons cov. (thousands)	35	3 500*	182	84[7]	2 280[7]	6 385	802	95	3 037/ 1 522	179*

Date	Europe *(concl.)*								Oceania	
	Netherlands	Poland[17]	Rumania	Sweden	Switzerland		Czechoslovakia	Yugoslavia	Australia[18]	New Zealand
	I[4]	III (A)	III (A)[7]	III (A/B)[4 7]	III (A)[7]	III (B)	III (A)[7]	I	III (A/B)	III (A)[7]
	W.S.	W.	W.S.	W.	W.S.[19]	W.	W.S.	W.S.	W.S.	W.
1929	113.1	106.3	72.0	84.6	113.6	128.0	.	.	86.5	77.8
1937	100.0	100.0	100.0	100.0	100.0	100.0	100.0[21]	100.0	100.0	100.0
1938	104.9	108.0	103.7	101.4	98.1	99.7	.	106.5	107.3	99.7
1939	110.9*	108.4[22]	109.1	105.2	102.2	98.3	.	107.8	108.6	105.8
1940	110.9*	.	83.1[23]	100.6[7]	.	102.8	.	112.9[24]	112.9	111.6
1941	.	.	87.8	99.7[7]	121.2	107.9	.	...	125.8	116.3
1942	.	.	89.2	105.4[7]	119.7	109.6	.	...	140.7	113.5
1943	.	.	...	108.5	118.3	104.9	.	...	147.9	116.7
1944	.	.	...	109.8	118.3	99.7	131.1[21]	...	149.0	...
1945	100.0[16]	.	...	102.7	121.0	109.6	80.7[25]	...	145.6	...
1946	...	.	...	117.4	...	122.9	85.3[25]	...	142.6	...
1946 : April	*130.5*	.	.	119.8	.	.	85.6	...	146.7	...
May	*134.0*	.	.	120.2	.	.	85.9	...	148.5	...
June	*137.0*	.	.	113.8	.	120.9	85.3	...	150.2	...
July	.	.	.	102.2	.	.	84.3	...	152.6	...
Aug.	.	.	.	118.0	.	.	84.4	...	154.2	...
Sept.	*147.5*	.	.	119.0	.	124.3	84.1	...	155.1	...
Oct.	.	.	.	120.9	.	.	87.5	...	155.6	...
Nov.	.	.	.	122.4	.	.	89.0	...	153.0	...
Dec.	...	.	.	114.2	.	127.7	87.5	...	151.2	...
1947 : Jan.	.	.	.	118.7	.	.	...	...	152.7	...
Feb.	.	.	.	118.1	.	.	...	...	153.8	...
Mar.	...	.	.	120.3	.	130.0	...	...	...	...
Persons cov. (thousands)	904	688	289	605/350	436	271	1 055[7]	457	755[7]/...	99

I. Compulsory social insurance statistics (sickness, accidents, etc.). II. Compulsory unemployment insurance statistics. III. Statistics of establishments : III (A). All establishments of a given importance; III (B). Representative sample of establishments ; III (A/B). Type B series (for the recent period) linked to a type A series. IV. Estimates. W. Wage earners. S. Salaried employees.

[1] Jan. [2] Jan. ; including salaried employees. [3] Old territory. [4] Including mining. [5] Since 1937, including the Saar territory. [6] Jan.-July. [7] Excluding building. [8] Including part of transport, but excluding a large part of building. [9] May. [10] Dec. ; since 1940, new series based on April 1939, and spliced to old series. Annual figures, averages of quarterly figures, except 1944 : Mar. and Dec. [11] Annual figures June of each year ; monthly figures since 1946 relate to Great Britain only. [12] Mar., June, Aug.-Dec. Beginning 1946, new series based on June 1939, and spliced to old series. [13] Statistics of type B, linked up with statistics of type A of the preceding period. [14] Fascist Confederation of Industrial Employers. [15] Jan.-Oct. [16] July-Dec. ; statistics of establishments type B for manufacturing industry (wage earners only). [17] Since Jan. 1939, including the territory of Silesia beyond the Olza. [18] Jan.-June. [19] Excluding N. Transylvania. [20] Covering all factories, as defined by Factory Act. [21] 31 Dec. [22] Oct.-Dec. [23] Jan., Mar.-Dec. [24] Jan.-Nov. [25] Averages of the 12 months ending in June of the year indicated. [26] Not compiled owing to dislocation of industry due to fuel and bad weather crisis.

(b) *Indices of total hours worked* (1937 = 100)

Date	America			Asia		Europe		
	United States[1]	Argentina	Colombia (Bogotá)	Japan[1]	Palestine	Germany[2]	Denmark	Finland
	III (A/B)[3]	III (B)[3]	III (B)	III (A/B)[3]	III (B)[7]	III (B)[8]	III (B)[3]	III (B)[3]
	W.	W.	W.	W.	W.	W.	W.	W.
1929	111.6	.	.	.	.	90.3	.	84.3
1937	100.0	.	.	100.0	.	100.0[9]	100.0	100.0
1938	78.5	.	100.0[4]	110.4[5]	.	107.2	99.4	104.9
1939	92.3	.	*91.5*	120.3[6]	100	112.0[10]	107.7	93.7
1940	100.4[r]	.	*78.5*	.	*111*	.	93.8	78.3
1941	131.5	.	...	.	*142*	.	94.2	110.0
1942	161.8[r]	.	...	.	*183*	.	101.5	107.6
1943	195.4	100.0	...	.	*220*	.	106.5	109.4
1944	190.9[r]	*103.4*	...	.	*211*	.	107.7[r]	103.3
1945	161.3[r]	*99.1*	...	.	*210*	.	94.3[r]	121.2
1946	140.5	*99.8*	...	.	...	.	117.6*	126.0
1946 : April	137.3[r]	*103.9*	...	.	*201*	.	111.2	.
May	135.6[r]	*109.6*	...	.	*193*	.	92.2[r]	.
June	138.9[r]	*99.4*	...	.	*183*	.	122.7	128.5
July	139.6[r]	*112.5*	...	.	*181*	.	121.3[r]	.
Aug.	146.4[r]	*105.6*	...	.	*190*	.	122.8	.
Sept.	147.5[r]	*105.9*	...	.	*199*	.	126.4	121.9
Oct.	148.3[r]	*90.7*	...	.	*201*	.	128.8	.
Nov.	149.6[r]	*101.1*	...	.	*191*	.	130.5	.
Dec.	153.1[r]	*105.7*	...	.	...	.	131.3	128.8
1947 : Jan.	151.5	*98.9*	...	.	...	.	122.7	.
Feb.	151.4*	*90.8*	...	.	...	.	123.0	.
Mar.	...	...	...	.	...	.	118.3	...
Persons cov. (thousands)	12 250/ 7 999	.	3*	2 995/ 1 510*	.	8 500*	90*	84[r]

Date	Europe *(concl.)*						
	France	Hungary	Ireland[12]	Italy	Norway	Poland	Sweden
	II (A)[11]	I-III (A)[1]	III (A)	III (A/B)	III (A/B)[8 9]	III (A)	III (A)[8 9]
	W.	W.[8]	W.	W.	W.	W.	W.
1929	.	100.4	.	109.1	83.8	111.4	84.7
1937	100.0	100.0	100.0	100.0	100.0[5]	100.0	100.0
1938	101.1[r]	105.8	99.3	104.1	98.2	108.9	99.7
1939	107.7[4r]	114.4	101.1	106.5[14]	101.0[r]	108.8[14]	104.3
1940	72.9[11r]	122.3	99.8	.	93.0[r]	.	99.4
1941	85.6[r]	...	93.6	.	99.8[r]	.	96.8
1942	98.9[r]	...	88.3	.	97.7[r]	.	102.8
1943	101.2[r]	...	90.5	.	96.8[r]	.	105.9
1944	96.8	...	94.0	.	91.8[r]	.	107.5
1945	96.3[r]	...	...	.	79.3	.	102.9
1946	105.9	.	...	.	...	.	...
1946 : April	105.7	.	.	.	.	.	.
May	.	.	.	.	.	.	.
June	.	.	.	.	90.4	.	.
July	107.9	.	.	.	.	.	.
Aug.	.	.	.	.	.	.	.
Sept.	.	.	.	.	...	.	.
Oct.	111.0	.	.	.	.	.	.
Nov.	.	.	.	.	.	.	.
Dec.	.	.	.	.	...	.	.
1947 : Jan.	112.0	.	.	.	.	.	.
Feb.	.	.	.	.	.	.	.
Mar.	.	.	.	.	...	.	.
Persons cov. (thousands)	2 280[r]	802/275*	125	3 037/1 522	176/102	688	598

I. Compulsory social insurance statistics (sickness, accidents, etc.). II. Compulsory unemployment insurance statistics. III. Statistics of establishments: III (A). All establishments of a given importance; III (B). Representative sample of establishments; III (A/B). Type B series (for the recent period) linked to a type A series. IV. Estimates. W: Wage earners. S: Salaried employees.

[1] Calculated by the I.L.O. by multiplying the index of numbers employed by the index of hours worked per worker. [2] Excluding building. [3] Including mining. [4] May. [5] Statistics of type B, linked up with statistics of type A of the preceding period. [6] Jan.-Aug. [7] Total number of days worked. [8] Old territory. [9] Since 1937, including the Saar Territory. [10] Jan.-July. [11] Including part of transport, but excluding a large part of building. [12] Dec.; since 1940, new series based on April 1939 = 100, and spliced to old series. Annual figures, averages of quarterly figures, except 1944: Mar. and Dec. [13] Week in October of each year. [14] Jan.-June.

(a) *Hours actually worked per worker*

Date	Africa	America				Asia	Europe		
	Egypt	Canada[4]	United States	Argentina (Buenos Aires)	Mexico	Japan	Germany[13]	Finland	France
	Mi., ind., serv.	Ind.[5]	Ind.[5]	Ind., transp., com.	Mi., ind., transp.	Ind.[6]	Ind.[13]	Ind.[5]	Ind.[5]
	Per week[1]	Per week	Per week	Per week	Per week[7]	Per day[8]	Per week[14]	Per fortnight	Per week[15]
Number of hours									
1929	.	.	44.2	49.09	.	(9.83)[9]	46.02	88.7	.
1930	.	.	42.1	48.46	.	.	44.22	86.4	48.0
1931	.	.	40.5	48.12	.	.	42.48	83.2	46.7
1932	.	48.9	38.3	47.60	.	9.63[10]	41.46	86.3	43.7
1933	.	48.7	38.1	47.41	.	9.95	42.96	87.3	45.3
1934	.	49.2	34.6	45.76	.	9.83	44.58	88.9	44.7
1935	.	48.7	36.6	45.49	.	9.85	44.46	89.6	44.5
1936	.	48.7	39.2	45.49	.	9.85	46.7	89.2	45.7
1937	.	48.8	38.6	45.49	.	9.91	47.6	89.9	40.2
1938	.	46.7	35.6	45.49	.	9.94[10]	48.5	91.7	38.7
1939	.	47.2	37.7	44.50	45.16	9.46[11]	48.7	90.1	40.8[16]
1940	.	50.1	38.1	45.25	43.60	.	49.2	89.6	35.6[17]
1941	.	50.5	40.6	45.05	44.79	.	50.1	88.3	38.2
1942	55.0[3]	51.3	42.9	45.05	45.01	.	49.2	90.1	41.3
1943	51.5	.	44.9	46.31	45.84	.	...	91.3	44.9
1944	50.5	.	45.2	46.34	...	.	...	91.2	43.1
1945	50.5	44.3[6]	43.4	46.68	...	.	...	89.8	42.5
1946	...	42.7	40.4	...	...	.	...	88.5	43.5*
1945 : Sept.	51.0[3]	44.7[r]	41.4	.	.	.	...	88.4	43.4
Dec.	.	38.1[r]	41.5	.	.	.	...	89.1	42.4
1946 : Mar.	51.0[3]	44.4[r]	40.7	.	.	.	...	90.0	43.5
June	.	42.4[r]	40.0	.	.	.	...	89.6	43.9
Sept.	...	42.9[r]	40.3	.	.	.	...	84.7	44.1*
Dec.	.	38.1[r]	40.9	.	.	.	...	89.7	43.8*
1947 : Mar.	...	...	40.4	.	.	.	...	...	...
Index numbers (1937 = 100)									
1929	.	.	114.5	107.9	.	(99.2)[9]	**100.0**	98.7	.
1930	.	.	109.1	106.5	.	.	*96.1*	96.1	119.4
1931	.	.	104.9	105.8	.	.	*92.3*	92.5	116.2
1932	.	100.2	99.2	104.6	.	97.2[10]	*90.1*	96.0	108.7
1933	.	99.8	98.7	104.2	.	100.4	*93.4*	97.1	112.7
1934	.	100.8	89.6	100.6	.	99.2	*96.9*	98.9	111.2
1935	.	99.8	94.8	100.0	.	99.4	*96.6*	99.7	110.7
1936	.	99.8	101.6	100.0	.	99.4	98.1	99.2	113.7
1937	.	**100.0**	**100.0**	**100.0**	.	**100.0**	**100.0**	**100.0**	**100.0**
1938	.	95.7	92.2	100.0	.	100.3[10]	101.9	102.0	96.3
1939	.	96.7	97.7	97.8	**100.0**	95.5[11]	102.3	100.2	101.5[16]
1940	.	102.7	98.7	99.5	*96.5*	.	103.4	99.7	88.6[17]
1941	.	103.5	105.2	99.0	*99.2*	.	105.3	98.2	95.0
1942	**100.0**[3]	105.1	111.1	99.0	*99.7*	.	103.4	100.2	102.7
1943	*93.6*	.	116.3	101.8	*101.5*	.	...	101.6	111.7
1944	*91.8*	.	117.1	101.9	...	.	...	101.4	107.2
1945	*91.8*	**100.0**[6]	112.4	102.6	...	.	...	99.9	105.7
1946	...	*96.4*	104.7	...	...	.	...	98.4	108.2*
1945 : Sept.	*92.7*[3]	*100.9*[r]	107.3[r]	.	.	.	...	98.3	108.0
Dec.	.	*86.0*[r]	107.5[r]	.	.	.	...	99.1	105.5
1946 : Mar.	*92.7*[3]	*100.2*[r]	105.4	.	.	.	...	100.1	108.2
June	.	*95.7*[r]	103.6	.	.	.	...	99.7	109.2
Sept.	...	*96.8*[r]	104.4	.	.	.	...	94.2	109.7*
Dec.	.	*86.0*[r]	106.0	.	.	.	...	99.8	109.0*
1947 : Mar.	...	...	104.7	.	.	.	...	...	...
Persons cov. (thousands)	104	735[r]	12 250/ 7 999	.	.	1 564	3 500*	84	2 280

[1] Annual figures : averages for Jan. and July. [2] July. [3] Jan. [4] Excluding overtime. Yearly figures : month of highest employment. [5] Excluding building. [6] Statistics of establishments. [7] Annual figures : Oct. [8] After deduction by I.L.O. of rest periods. [9] I.L.O. estimates based on Imperial Cabinet statistics of normal hours. [10] From 1932 to 1938, statistics of the Bank of Japan ; from 1939, statistics of the Imperial Cabinet, with which statistics of the Bank of Japan have been incorporated. [11] Jan.-Nov. [12] Territory before 1938. [13] Up to 1936, excluding building ; from 1939, including mining. [14] Average hours slightly lowered by absence for sickness, holidays, etc. [15] From 1930 to 1941, monthly figures : 1st of the following month. Annual figures, since 1941, averages of quarterly figures, except 1944 : Mar. and Dec. [16] Jan.-July [17] Dec.

(a) *Hours actually worked per worker* (concl.)

Date	Europe *(concl.)*								
	G. Britain and N. Ireland	Hungary	Ireland	Italy	Norway	Netherlands	Poland	Sweden	Switzerland
	Ind.[1]	Ind.[2]	Ind.[3]	Ind.	Ind.[3]	Ind.[7] [17]	Ind.	Ind.[3] [11]	Ind.
	Per week	Per day	Per week	Per month[6]	Per week	Per week[6]	Per week[6]	Per week[12]	Per week
Number of hours									
1929	.	8.97	.	183.0	.	.	44.8	(47.7)[13]	(47.8-48.2)[15] [14]
1932	.	8.53	.	172.0	.	.	41.4	.	.
1933	.	8.59	.	170.0	.	.	41.5	46.0	(45.3-46.5)[16]
1934	.	8.78	.	164.5	.	.	42.2	47.0	(45.7-46.9)[16]
1935	.	8.83	.	152.5	.	46.9	42.6	47.4	.
1936	.	8.64	.	156.0	45.5	46.7	42.7	47.6	.
1937	.	8.59	.	165.5	44.8	47.1	43.3	47.2	(46.4-47.0)[16]
1938	46.5[4]	8.42	.	158.0	44.1	46.8	43.7	46.3[7]	(45.8-46.9)
1939	.	8.24	44.6[4]	159.0	45.2	48.1[7]	43.7[10]	45.6[7]	(46.8-47.7)
1940	.	8.36[7]	44.4[4]	162.0	42.7	44.6[7]	.	46.6	(47.3)
1941	.	8.31	43.5[4]	167.0	43.7	45.8[7]	.	47.0	(47.0)
1942	.	8.59	43.1[4]	166.5	42.9	48.2[7]	.	47.2	(46.8)
1943	50.0[4]	8.84	43.5[4]	...	42.2	49.8	.	47.3	47.1
1944	48.9	.	43.4[4]	...	41.1	.	.	47.2	47.3
1945	47.2	8.38	...	...	41.2	46.8	.	47.4	47.6
1946	46.0	...	...	...	...	...	.	46.8	47.9
1945 : Sept.	47.4[4]	.	.	.	.	46.9[17] [11]	.	.	47.8
Dec.	.	.	.	...	.	47.2	.	47.4	47.6
1946 : Mar.	45.8[4]	.	.	.	.	47.3	.	.	47.8
June	.	.	.	...	.	47.5	.	47.0	47.9
Sept.	46.2[4]	.	.	.	.	...	.	.	48.0
Dec.	.	.	.	...	.	...	.	46.8	47.8
1947 : Mar.	...	.	.	.	.	...	.	45.1	47.9
Index numbers (1937 = 100)									
1929	.	104.4	.	110.6	.	.	103.5	(101.1)[13]	102.8[15]
1932	.	99.3	.	103.9	.	.	95.6	.	.
1933	.	100.0	.	102.7	.	.	95.8	97.5	98.3[16]
1934	.	102.2	.	99.4	.	.	97.5	99.6	99.1[16]
1935	.	102.8	.	92.1	.	99.6	98.4	100.4	.
1936	.	100.6	.	94.3	101.6	99.2	98.6	100.8	.
1937	.	**100.0**	.	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**[15]
1938	**100.0**[4]	98.0	.	95.5	98.4	99.4	100.9	98.1	99.3
1939	.	95.9	**100.0**[4]	96.1	100.9	102.1[7]	100.9[10]	96.6	101.2
1940	.	97.3[7]	*99.6*[4]	97.9	95.3	94.7[7]	.	98.7	101.3
1941	.	96.7	*97.5*[4]	100.9	97.6	97.2[7]	.	99.6	100.6
1942	.	100.0	*96.6*[4]	100.6	95.8	102.3[7]	.	100.0	100.2
1943	*107.5*[4]	102.9	*97.5*[4]	...	94.2	105.7	.	100.2	100.9
1944	*105.2*[7]	.	*97.3*[4]	...	91.7	.	.	100.0	101.3
1945	*101.5*	97.6	...	...	92.0	99.4	.	100.4	101.9
1946	*98.9*	...	...	...	...	...	.	99.2	102.6
1945 : Sept.	*101.9*[4]	.	.	.	.	**100.0**[7] [11]	.	.	102.4
Dec.	.	.	.	...	.	*100.6*	.	100.4	101.9
1946 : Mar.	*98.5*[4]	.	.	.	.	*100.9*	.	.	102.4
June	.	.	.	...	.	*101.3*	.	99.6	102.6
Sept.	*99.4*[4]	.	.	.	.	...	.	.	102.8
Dec.	.	.	.	...	.	...	.	99.2	102.4
1947 : Mar.	...	.	.	.	.	...	.	95.6	102.6
Persons cov. (thousands)	...	275*	123	1 390	102*	488[7]	629	543	321[7]

[1] 16 industry groups including building, transport (except railways) and iron mining. [2] Oct. [3] July. [4] Jan. [5] Excluding building. [6] Annual figures : averages of June and Dec. [7] Including building. [8] Annual figures, 1935-1938 : averages for the second half year ; 1939-1945 : one week in Sept., Oct. and Nov. [9] Monthly figures : averages of weeks without holidays. [10] Jan.-June. [11] Including mining. [12] Annual figures : from 1929 to 1937 and from 1940 to 1946, Nov. ; 1938, July and Dec. ; 1939, May and June. [13] I.L.O. estimates based on statistics of earnings. [14] Up to 1942, I.L.O. estimates from percentages of table IV (b). [15] I.L.O. estimates based on census of establishments (Aug. 1929 and Sept. 1937). [16] Averages for the second and third quarters. [17] Excluding mining.

(b) *Percentage distribution of workers according to hours worked*

Date	America								Europe					
	Canada[1 2]					United States			Finland[2]			France[3]		
	Per week					Per week[4]			Per fortnight			Per week		
	Up to 40 h.	41-47 h.	48 h.	49-54 h.	55 h. and more	Up to 39 h.	40-49 h.	50 h. and more	Under 80 h.	80.0-95.9h.	96 h. and more	Under 40 h.	40 h.	Over 40 h.
1929	.	.	.	.	.	.	.	.	7.5	58.9	33.6	.	.	.
1930	.	.	.	.	.	.	.	.	3.3	62.0	34.7	0.4	0.8	98.8
1931	.	.	.	.	.	.	.	.	25.2	45.4	29.4	8.0	7.7	84.3
1932	15.7	21.3	16.4	22.5	24.1	.	.	.	8.8	66.7	24.5	20.2	11.2	68.6
1933	16.8	21.5	15.3	22.5	23.9	.	.	.	3.7	64.8	31.5	9.2	8.3	82.5
1934	13.3	22.3	18.0	21.3	25.1	.	.	.	0.8	68.1	31.1	13.1	9.5	77.4
1935	12.8	23.7	23.0	18.9	21.6	.	.	.	0.6	68.8	30.6	13.7	9.4	76.9
1936	12.5	23.7	22.9	19.2	21.7	.	.	.	0.3	68.2	31.5	7.1	6.9	86.0
1937	11.8	25.3	22.1	19.6	21.2	.	.	.	0.0	65.7	34.3	6.7	84.9	8.4
1938	21.0[5]	25.6[6]	20.7	17.4	15.4	.	.	.	0.3	73.3	26.4	21.5	76.6	1.9
1939	18.0[5]	24.7[6]	22.2	19.1	16.0	.	.	.	2.9	74.1	23.0	11.1[8]	63.2[8]	25.7[8]
1940	13.2[5]	17.1[6]	19.3	20.7	29.7	20.0	60.6	19.4	...	...	...	.	.	.
1941	11.6[5]	15.8[6]	19.5	21.8	31.3	18.1	63.4	18.5	...	...	...	32.5	42.5	25.0
1942	12.8[5]	14.8[6]	21.4	22.1	28.9	14.3	61.5	24.2	...	...	...	19.6[9]	40.9[9]	39.4[9]
1943	...	...	...	...	...	12.6	62.3	25.1	...	...	...	6.6	23.9	69.5
1944	...	...	...	...	...	15.8	58.3	25.9	...	...	...	12.3	23.3	64.4
1945	...	...	...	...	...	18.3	62.3[6]	19.4[7]	...	...	...	11.1	34.8	54.1
1946	...	...	...	...	...	15.7	67.7[6]	16.6[7]	...	...	...	5.5[10]	41.3[10]	53.8[10]
Persons covered thous'ds	587					47 000[7]			.			2 280		

Date	Europe *(concl.)*											
	Italy[2 10]				Sweden[2 14]				Switzerland			
	Per week[11]				Per week[15]				Per week			
	Under 40 h.	40.0-44.9 h.	45.0-48.0 h.	Over 48 h.	Up to 40 h.	41-47 h.	48 h.	Over 48 h.	Under 36 h.	36.0-47.9 h.	48 h.	Over 48 h.
		a	*b*									
1929		8.9	75.5	15.6	.	.	.	.	.	.	.	.
1930		20.8	66.7	12.5	.	.	.	.	.	.	.	.
1931		24.2	64.6	11.2	.	.	.	.	.	.	.	.
1932		28.4	63.6	8.0	.	.	.	.	.	.	.	.
1933		20.8	70.7	8.5	8.5	32.7	51.3	7.5	7.2[17]	20.8[17]	59.5[17]	12.5[17]
1934		30.5	61.9	7.6	8.0	29.1	42.5	20.4	4.2[17]	21.2[17]	65.3[17]	9.3[17]
1935	28.3[12]	39.6[12]	21.7[12]	10.4[12]	6.1	35.4	37.1	21.4	.	.	.	.
1936	27.5	44.0	18.7	9.8	4.6	35.8	39.6	20.0	.	.	.	.
1937	16.5	47.4	26.7	9.4	4.6	41.9	36.5	17.0	.	.	.	.
1938	21.7	52.2	18.8	7.3	8.5	46.1	36.6	8.8	2.8	22.1	69.9	5.2
1939	19.1[13]	51.9[13]	20.4[13]	8.6[13]	16.3	58.0	12.3	13.4	1.7	14.2	71.8	12.3
1940	.	.	.	.	10.2	40.2	29.5	20.1	1.2	14.7	66.6	17.5
1941	.	.	.	.	7.1	42.3	31.6	19.0	0.8	18.3	69.7	11.2
1942	.	.	.	.	4.4	45.4	29.8	20.4	0.8	20.2	70.6	8.4
1943	.	.	.	.	3.1	47.8	31.9	17.2	0.7	20.3	70.9	8.1
1944	.	.	.	.	2.7	51.5	27.3	18.5	0.9	17.5	73.8	7.8
1945	.	.	.	.	3.2	49.1	27.0	20.7	0.3	16.1	75.8	7.8
1946	.	.	.	.	3.3	55.6	23.1	18.0	0.0	12.5	77.5	10.0
Persons covered thous'ds	1 156				479[7]				321[7]			

[1] Excluding overtime ; figures for the month of highest employment. [2] Excluding building. [3] Up to 43 h. [4] 44-47 h. [5] Bureau of the Census ; non-agricultural employment, including self-employed ; Oct. of each year. [6] 40-48 h. [7] 49 h. and over. [8] Jan.-July. [9] Mar., June, Sept. [10] Ministry of Corporations. [11] Before May 1935 : *a* = under 48 hours ; *b* = 48 hours. [12] May-Dec. [13] Jan.-June. [14] Including mines. [15] Annual figures : from 1933 to 1937 and from 1940 to 1946, Nov. figures ; 1938, July ; 1939, June. [16] 1st Jan., 1st April, 1st July. [17] Averages for the second and third quarters.

BIBLIOGRAPHY

Book Notes

INTERNATIONAL PUBLICATIONS

Report of the Director-General. First Item on the Agenda. International Labour Conference, Thirtieth Session, Geneva, 1947. Report I. International Labour Office, Geneva, 1947. iv+120 pp. 60c.; 2s. 6d.

The report of the Director-General of the International Labour Office to the Conference opens with a reference to the political developments which have taken place since the last Conference, and proceeds to survey the economic situation in individual countries before discussing present trends in social policy and the activities of the International Labour Organisation. The chapter on trends in social policy contains sections on employment organisation, migration, industrial relations, the work of children and young persons, women's work, industrial safety, social insurance, agriculture, co-operation and maritime questions. The chapter on the activities of the I.L.O. gives an account of the relations of the Organisation with the United Nations and other international organisations, including the Food and Agriculture Organization, the International Bank for Reconstruction and Development, the United Nations Conference on Trade and Employment, UNESCO, the World Health Organisation and the International Refugee Organisation, and includes notes on the work of the Industrial Committees and on some of the advisory missions undertaken by the I.L.O.

Employment Service Organisation. Fifth Item on the Agenda. International Labour Conference, Thirtieth Session, Geneva, 1947. Report V (2). International Labour Office, Geneva, 1947. 132 pp. 75c.; 3s.

This report contains the replies of Governments to the questionnaire which appeared in the first report on the subject [1], makes a brief survey of the replies, and indicates the principal questions which require consideration by the Conference. The report ends with proposals on the form of international regulations on the subject of employment service organisation, including proposed conclusions relating to a Convention and a Recommendation.

NON-OFFICIAL PUBLICATIONS

Economics of Migration. By Julius ISAAC. London, Kegan Paul, Trench, Trubner and Co., Ltd., 1947. ix+285 pp.

This book deals with an important aspect of the migration problem. The author is not afraid of bringing into his argument questions, such as that of assimilation, which are not strictly economic but which are nevertheless of great importance in understanding the complexities of the migration process. The conclusion

[1] International Labour Conference, Thirtieth Session, Geneva, 1947, Report V(1): *Employment Service Organisation* (I.L.O., Montreal, 1946). For a note on this report, see *International Labour Review*, Vol. LIV, Nos. 5-6, Nov.-Dec. 1946, p. 414.

reached is that there is wide scope for reducing the obstacles to large-scale migration. This does not mean that there should be free migration in the pre-1914 sense of the term. It means planned migration, but planned migration need not be synonymous with restricted migration. It may, on the contrary, be a means to increased migration. The author points out that there are signs that some immigration countries are recognising this fact, but on the other hand he rather underestimates the extent to which the European sources of emigration are tending to dry up, especially from a long-term point of view.

Précis de législation industrielle (droit du travail). By André ROUAST and Paul DURANT. Second Edition. Paris, Librairie Dalloz, 1947. 581+VIII pp.

The second edition of this survey of labour law is in fact a completely new work. After the political, economic and social upheavals which have taken place in France since the publication of the first edition, something more was necessary than merely to bring this work up to date, and though fresh legislation on the subject is still appearing, the authors have completely altered their presentation of the subject.

In the introductory section, the authors define the objects of labour legislation, describe the stages in the evolution of labour law, and point out its sources. In conclusion, some of the characteristic features of labour law are brought out, and an attempt is made to assess the place of labour law in legislation in general.

The first part of the survey deals with the social organisation of work, in other words, industrial relations. After a short description of the State authorities which play a part in the administration of labour legislation (Ministry of Labour, the labour inspectorate, etc.), the writers describe the two main forms of organisation of purely social origin, the undertaking and the trade union. In the chapter on the undertaking, the analysis of legislation concerning works councils and staff delegates is of particular interest. The chapter on trade unions deals with the constitution, activity and growth of trade organisations. After this description of the machinery of labour organisation, the writers proceed to discuss the problems arising out of its practical working : collective bargaining and the settling of labour disputes. Unfortunately, these chapters are mainly of historical interest ; though supplemented by an additional note, they do not go beyond the middle of 1946 and the writers have not been able to take into account recent legislative developments, such as the French Act of 23 December 1946 concerning collective agreements. [1]

The second part of the book deals with individual labour relationships, *i.e.*, everything relating to the engagement of wage earners, individual contracts of employment, the payment of wages and protection of labour (hours of work and allied questions, safety, health, etc.). There is a special chapter dealing with classes of worker who are not covered by individual contracts of employment with their employer, in particular, apprentices, domestic workers and small traders.

In the last part of the survey, the writers discuss workers' protection against all forms of risk ; social security schemes, social insurance, family allowances, accident insurance and measures against unemployment.

La puissance ouvrière. By Paul LOUIS. Paris, Librairie Valois, 1946. XI+181 pp. 120 frs.

The writer sketches out in bold lines the working class struggles since the beginning of the industrial era and emphasises the two aspects of these struggles : political and trade union action. He asks the question : " Can the power of the working class, drawing its strength from parties devoted to its cause, and from trade organisations joined by hardly any but proletarians and wage earners of every kind—can this power, whose constituent parts are constantly renewed, produce the men who can dig the grave of modern society and at the same time build the society of the future ? " He supplies his own answer : " Yes ... the man who has been the moving spirit of a big miners' union, or of a metal or woodworkers' federation, can never, except by a fluke, be inferior to his task ". This is a book that combines history with doctrine, and is an act of faith in the power of the organised worker.

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[1] Cf. *International Labour Review*, Vol. LV, Nos. 3-4, Mar.-Apr. 1947, p. 287.

Joseph Weydemeyer, Pioneer of American Socialism. By Karl OBERMANN. New York, International Publishers, 1947. 160 pp. $2.25.

This book is in essence an account of the last 15 years of Weydemeyer's life, from 1851 to 1866, which he spent in the United States, after fleeing from Prussian reaction after the revolutionary events of 1848. While entering actively into all phases of his new citizenship—he fought for the North against the South in the Civil War—he paid chief attention to work among the great body of German Americans. In the 1850's German immigration to the U.S. annually exceeded 200,000, and among these new citizens, Weydemeyer devoted himself to labour problems, in particular becoming the leading teacher of the ideas of Marx and Engels. He also played a considerable part in securing Lincoln's election, seeing in him a supporter of free labour. His death from cholera at 48 interrupted his untiring endeavour to fuse the very important German-American labour movement with the general trade-union and political movement of the American labouring class, and to spread Marxism by founding Marxist groups throughout the country. His story is an integral part of the formation and development of the abour movement in the United States.

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NON-OFFICIAL PUBLICATIONS

Indo-China. London, Union of Democratic Control, 1947. 19 pp. 1s.

Labour's Colonial Policy. Fabian Colonial Bureau Pamphlet, Controversy Series, No. 3. London, Fabian Publications, Ltd., and Victor Gollancz Ltd., 1947. 28 pp. 1s.

Lehrbuch des Völkerrechts. By Dr. Paul GUGGENHEIM. Basle, Verlag für Recht und Gesellschaft AG., 1947. XVIII+159 pp. 12 frs.

Measuring and Rating Employee Value. By John B. PROBST. New York, The Ronald Press Company, 1947. xi+166 pp. illus. $5.

Secondary Education for All. By Joan THOMPSON. London, Fabian Publications Ltd., and Victor Gollancz Ltd., 1947. 19 pp. 1s.

Works Councils and Committees. Third Edition. London, Industrial Welfare Society, 1947. 40 pp. 2s.

Zwarte Handel in Levensmiddelen. By R. MIRY. Brussels, Uitgersmaatschappij A. Manteau N.V., 1946. 123 pp.

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[1] Mention in this list does not preclude publication of a book note in a subsequent issue of the *Review*.

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